

JOB NO.: TCS01321/23

**CEDD SERVICE CONTRACT NO. EDO 12/2023
ENVIRONMENTAL TEAM FOR DEVELOPMENT OF
ANDERSON ROAD QUARRY SITE – SITE FORMATION
AND ASSOCIATED INFRASTRUCTURE WORKS**

**MONTHLY ENVIRONMENTAL MONITORING AND AUDIT
REPORT (NOVEMBER 2025)**

**PREPARED FOR
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
(CEDD)**

| Date | Reference No. | Prepared By | Certified By |
|------------------|-------------------------|--|---|
| 11 December 2025 | TCS01321/23/600/R0793v1 |  |  |

Nicola Hon
(Environmental Consultant) Tam Tak Wing
(Environmental Team Leader)

| Version | Date | Remarks |
|----------------|------------------|------------------|
| 1 | 11 December 2025 | First submission |
| | | |
| | | |

EXECUTIVE SUMMARY

- ES01 Action-United Environmental Services & Consulting (AUES) has been awarded the Civil Engineering and Development Department (CEDD) Service Contract No. EDO 8/2022 - Environmental Team for Development of Anderson Road Quarry Site – Site Formation and Associated Infrastructure Works (hereinafter called “the Service Contract) on 15 September 2023. As notifying by AECOM Asia Company Limited (Engineer’s Representative) subsequently, the commencement date of the Service Contract is on 22 September 2023 for the Contract Period of 22 months.
- ES02 The previous service contract nos. NTE/07/2016 and EDO 8/2022, covering the environmental monitoring and audit (EM&A) service for the Development of Anderson Quarry Site (ARQ) for Contracts 1, 2, 3, 4 and 5 was completed in September 2022 and September 2023 respectively.
- ES03 The Services under the Service Contract is to provide EM&A services for the Works Contracts pursuant to the requirement of Environmental Team (ET) under the EM&A manual to ensure that the environmental performance of the Works Contracts comply with the requirement specified in the EM&A Manual and EIA Report of Development of ARQ and other relevant statutory requirements.
- ES04 To facilitate the project management and implementation, the ARQ project involved five major infrastructure works CEDD contracts, the commencement date and anticipated completion date of the five works contracts are summarized in below table.

| Contract | Commencement date | Anticipated completion date |
|-------------------------|--------------------------|------------------------------------|
| NE/2016/01 (Contract 1) | December 2016 | September 2023 |
| NE/2016/05 (Contract 2) | March 2017 | September 2023 |
| NE/2017/03 (Contract 3) | May 2018 | January 2025 |
| ED/2020/02 (Contract 4) | July 2021 | December 2025 |
| ED/2019/02 (Contract 5) | March 2021 | January 2025 |

- ES05 As notified by AECOM, the certificate of completion of the last section of the works have been issued for Contract 1 and Contract 2 on 30 June 2023 and 15 May 2023 respectively. Moreover, contract nos. NE/2017/03 (Contract 3) and ED/2019/02 (Contract 5), covering the environmental monitoring and audit (EM&A) service was completed in January 2025. In view of the completion of major construction works, the EM&A service for Contract 1 and Contract 2 under service contract no. EDO 8/2022 was ceased in late September 2023 and the relevant monitoring stations have been handover to current contract no. EDO 8/2022.
- ES06 This is the monthly EM&A report presenting the monitoring results and inspection findings for Contracts 4 for the period from **1 to 30 November 2025** (hereinafter ‘the Reporting Period’).

ENVIRONMENTAL MONITORING AND AUDIT ACTIVITIES

- ES07 Environmental monitoring activities under the EM&A programme in the Reporting Period are summarized in the following table.

| Environmental Aspect | Environmental Monitoring Parameters / Inspection | Reporting Period | |
|-----------------------------|---|--|------------------------|
| | | Number of Active Monitoring Locations | Total Occasions |
| Air Quality | 1-hour TSP | 7 | 105 |
| | 24-hour TSP | 4 | 20 |
| Construction Noise | $L_{eq(30min)}$ Daytime for Contract NE/2016/01 | 8 | 32 |
| | $L_{eq(30min)}$ Daytime for Contract NE/2017/03 | 1 | 4 |

BREACH OF ACTION AND LIMIT (A/L) LEVELS

- ES08 No exceedance of air quality was recorded in the Reporting Period. For construction noise monitoring, no Limit Level exceedance was recorded and no noise complaint (which triggered Action Level) was received in the reporting period. The environmental exceedance, NOE issued and investigation of exceedance are summarized in the following table.

| Environmental Aspect | Monitoring Parameters | Action Level | Limit Level | Event & Action | |
|----------------------|-------------------------|--------------|-------------|----------------|--------------------|
| | | | | NOE Issued | Corrective Actions |
| Air Quality | 1-hour TSP | 0 | 0 | 0 | NA |
| | 24-hour TSP | 0 | 0 | 0 | NA |
| Construction Noise | $L_{eq(30min)}$ Daytime | 0 | 0 | 0 | NA |

ENVIRONMENTAL COMPLAINT

- ES09 In the reporting period, no environmental complaint was received in the Reporting Period.

NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

- ES10 No environmental summons or successful prosecutions for the Project were recorded in the Reporting Period.

REPORTING CHANGE

- ES11 There is no reporting change in the Reporting Period.

SITE INSPECTION

- ES12 In this Reporting Period, joint site inspections to evaluate the site environmental performance for **Contract 4** were carried out by the RE, ET and Contractor on **5, 10, 20 and 26 November 2025** in which IEC joined the site inspection with SSEMC on **20 November 2025**. No non-compliance was noted during the site inspection.

FUTURE KEY ISSUES

- ES13 The Contractor are reminded to pay special attention on water quality mitigation measures and should fully implement the measures as recommended in the EM&A Manual, in particular to prevent muddy water or other water pollutants from site surface overflow to public area should be properly maintained.
- ES14 Since construction site is highly visible to the resident at nearby estates, the Contractors should pay special attention on potential environmental impact generated by the site activities and adhere implement adequate air quality and noise mitigation measures as far as practicable to reduce the impact to the public.
- ES15 Construction noise is one of the key environmental issues during construction work of the Project. Noise mitigation measures such as using quiet plants and noise barriers shall be implemented where practicable according to the EM&A manual.
- ES16 In addition, the Contractors should ensure all effluent discharge shall be fulfilled the Technical Memorandum of Effluent Discharged into Drainage and Sewerage Systems, inland and Coastal Waters criteria or relevant discharge license requirement.

Table of Contents

| | |
|---|-----------|
| 1. INTRODUCTION | 1 |
| 1.1 PROJECT BACKGROUND | 1 |
| 1.2 REPORT STRUCTURE | 2 |
| 2. PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS | 3 |
| 2.1 CONSTRUCTION CONTRACT PACKAGING | 3 |
| 2.2 PROJECT ORGANIZATION | 4 |
| 2.3 CONSTRUCTION PROGRESS | 4 |
| 3. SUMMARY OF IMPACT MONITORING REQUIREMENTS | 6 |
| 3.1 GENERAL | 6 |
| 3.2 MONITORING PARAMETERS | 6 |
| 3.3 MONITORING LOCATIONS | 6 |
| 3.4 MONITORING FREQUENCY AND PERIOD | 8 |
| 3.5 MONITORING EQUIPMENT | 9 |
| 3.6 MONITORING METHODOLOGY | 9 |
| 3.7 DERIVATION OF ACTION/LIMIT (A/L) LEVELS | 11 |
| 3.8 DATA MANAGEMENT AND DATA QA/QC CONTROL | 12 |
| 4. AIR QUALITY MONITORING | 13 |
| 4.1 GENERAL | 13 |
| 4.2 RESULTS OF AIR QUALITY MONITORING | 13 |
| 5. CONSTRUCTION NOISE MONITORING | 15 |
| 5.1 GENERAL | 15 |
| 5.2 NOISE MONITORING RESULTS IN REPORTING MONTH | 15 |
| 6. WASTE MANAGEMENT | 17 |
| 6.1 GENERAL WASTE MANAGEMENT | 17 |
| 6.2 RECORDS OF WASTE QUANTITIES | 17 |
| 7. SITE INSPECTION | 18 |
| 7.1 REQUIREMENTS | 18 |
| 7.2 FINDINGS / DEFICIENCIES DURING THE REPORTING MONTH | 18 |
| 8. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE | 19 |
| 8.1 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION | 19 |
| 9. IMPLEMENTATION STATUS OF MITIGATION MEASURES | 20 |
| 9.1 GENERAL REQUIREMENTS | 20 |
| 9.2 TENTATIVE CONSTRUCTION ACTIVITIES IN THE COMING MONTH | 20 |
| 9.3 KEY ISSUES FOR THE COMING MONTH | 21 |
| 10. CONCLUSIONS AND RECOMMENDATIONS | 22 |
| 10.1 CONCLUSIONS | 22 |
| 10.2 RECOMMENDATIONS | 22 |

LIST OF TABLES

| | |
|-----------|--|
| TABLE 2-1 | STATUS OF ENVIRONMENTAL LICENSES AND PERMITS OF THE CONTRACT 4 |
| TABLE 3-1 | SUMMARY OF EM&A REQUIREMENTS |
| TABLE 3-2 | IMPACT MONITORING STATIONS - AIR QUALITY |
| TABLE 3-3 | IMPACT MONITORING STATIONS - CONSTRUCTION NOISE |
| TABLE 3-4 | ADDITIONAL IMPACT MONITORING STATIONS – CONSTRUCTION NOISE |
| TABLE 3-5 | AIR QUALITY MONITORING EQUIPMENT |
| TABLE 3-6 | CONSTRUCTION NOISE MONITORING EQUIPMENT |
| TABLE 3-7 | ACTION AND LIMIT LEVELS FOR AIR QUALITY MONITORING |
| TABLE 3-8 | ACTION AND LIMIT LEVELS FOR CONSTRUCTION NOISE |
| TABLE 4-1 | SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-1) |
| TABLE 4-2 | SUMMARY OF 1-HOUR TSP MONITORING RESULTS (AMS-2) |
| TABLE 4-3 | SUMMARY OF 1-HOUR TSP MONITORING RESULTS (AMS-3) |
| TABLE 4-4 | SUMMARY OF 1-HOUR TSP MONITORING RESULTS (AMS-4) |
| TABLE 4-5 | SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-5) |
| TABLE 4-6 | SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-6) |
| TABLE 4-7 | SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-7) |
| TABLE 5-1 | SUMMARY OF CONSTRUCTION NOISE MONITORING RESULTS |
| TABLE 5-2 | SUMMARY OF CONSTRUCTION NOISE MONITORING RESULTS |
| TABLE 6-1 | SUMMARY OF QUANTITIES OF INERT C&D MATERIALS |
| TABLE 6-2 | SUMMARY OF QUANTITIES OF C&D WASTES |
| TABLE 7-1 | SITE OBSERVATIONS OF CONTRACT 4 |
| TABLE 8-1 | STATISTICAL SUMMARY OF ENVIRONMENTAL COMPLAINTS |
| TABLE 8-2 | STATISTICAL SUMMARY OF ENVIRONMENTAL SUMMONS |
| TABLE 8-3 | STATISTICAL SUMMARY OF ENVIRONMENTAL PROSECUTION |
| TABLE 9-1 | ENVIRONMENTAL MITIGATION MEASURES |

LIST OF APPENDICES

| | |
|------------|---|
| APPENDIX A | LAYOUT PLAN OF THE PROJECT |
| APPENDIX B | PROJECT ORGANIZATION STRUCTURE |
| APPENDIX C | THREE-MONTHS ROLLING CONSTRUCTION PROGRAMME |
| APPENDIX D | MONITORING LOCATIONS FOR IMPACT MONITORING |
| APPENDIX E | CALIBRATION CERTIFICATE OF MONITORING EQUIPMENT AND HOKLAS-ACCREDITATION CERTIFICATE OF THE TESTING LABORATORY |
| APPENDIX F | EVENT AND ACTION PLAN |
| APPENDIX G | IMPACT MONITORING SCHEDULE |
| APPENDIX H | DATABASE OF MONITORING RESULT |
| APPENDIX I | GRAPHICAL PLOTS FOR MONITORING RESULT |
| APPENDIX J | METEOROLOGICAL DATA |
| APPENDIX K | WASTE FLOW TABLE |
| APPENDIX L | IMPLEMENTATION SCHEDULE FOR ENVIRONMENTAL MITIGATION MEASURES |
| APPENDIX M | COMPLAINT LOG |
| APPENDIX N | IMPLEMENTATION STATUS FOR WATER QUALITY MITIGATION MEASURES |

1. INTRODUCTION

PROJECT BACKGROUND

- 1.1.1 Development of Anderson Road Quarry (ARQ) is to provide land and the associated infrastructures for the proposed land used at the existing ARQ Site at the North-eastern of East Kowloon according to the final Recommended Outline Development Plan (hereinafter named as the Project Works).
- 1.1.2 To facilitate the project management and implementation, the ARQ project involved five major infrastructure works CEDD contracts, the commencement date and anticipated completion date of the five works contracts are summarized in below table.

| Contract | Commencement date | Anticipated completion date |
|-------------------------|-------------------|-----------------------------|
| NE/2016/01 (Contract 1) | December 2016 | September 2023 |
| NE/2016/05 (Contract 2) | March 2017 | September 2023 |
| NE/2017/03 (Contract 3) | May 2018 | January 2025 |
| ED/2020/02 (Contract 4) | July 2021 | December 2025 |
| ED/2019/02 (Contract 5) | March 2021 | January 2025 |

- 1.1.3 Action-United Environmental Services & Consulting (AUES) has been awarded the Civil Engineering and Development Department (CEDD) Service Contract No. EDO 8/2022 - Environmental Team for Development of Anderson Road Quarry Site – Site Formation and Associated Infrastructure Works (hereinafter called “the Service Contract) on 15 September 2023. As notifying by AECOM Asia Company Limited (Engineer’s Representative) subsequently, the commencement date of the Service Contract is on 22 September 2023 for the Contract Period of 22 months.
- 1.1.4 The Services under the Service Contract is to provide EM&A services for the Works Contracts pursuant to the requirement of Environmental Team (ET) under the EM&A manual to ensure that the environmental performance of the Works Contracts comply with the requirement specified in the EM&A Manual and Environmental Impact Assessment (EIA) Report of Development of Anderson Road Quarry and other relevant statutory requirements.
- 1.1.5 The previous service contract nos. NTE/07/2016 and EDO 8/2022, covering the EM&A services for the Development of ARQ site for Contracts 1, 2, 3, 4 and 5 was completed in September 2022 and September 2023 respectively.
- 1.1.6 As notified by AECOM, the certificate of completion of the last section of the works have been issued for Contract 1 and Contract 2 on 30 June 2023 and 15 May 2023 respectively. Moreover, contract nos. NE/2017/03 (Contract 3) and ED/2019/02 (Contract 5), covering the environmental monitoring and audit (EM&A) service was completed in January 2025. In view of the completion of major construction works, the EM&A service for Contract 1 and Contract 2 under service contract no. EDO 8/2022 was ceased in late September 2023 and the relevant monitoring stations have been handover to current contract no. EDO 8/2022.
- 1.1.7 According to the Approved EM&A Manual, air quality and noise monitoring are required to be monitored during the construction phase of the Project. As part of the EM&A program, baseline monitoring is required to determine the ambient environmental conditions. Baseline monitoring including air quality and noise conducted between **January** and **April 2019** at all designated monitoring locations were before construction work commencement. Furthermore, the Baseline Monitoring Report which verified by the Independent Environmental Checker (hereinafter referred as “the IEC”) has been submitted to Environmental Protection Department (EPD) on **9 May 2017** for endorsement.
- 1.1.8 This is the monthly EM&A report presenting the monitoring results and inspection findings for Contracts 4 for the period from **1 to 30 November 2025** (hereinafter ‘the Reporting Period’).

REPORT STRUCTURE

1.2.1 The monthly EM&A Report is structured into the following sections:-

- Section 1** *Introduction*
- Section 2** *Project Organization and Construction Progress*
- Section 3** *Summary of Impact Monitoring Requirements*
- Section 4** *Air Quality Monitoring*
- Section 5** *Construction Noise Monitoring*
- Section 6** *Waste Management*
- Section 7** *Site Inspections*
- Section 8** *Environmental Complaints and Non-Compliance*
- Section 9** *Implementation Status of Mitigation Measures*
- Section 10** *Conclusions and Recommendations*

2. PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS**2.1 CONSTRUCTION CONTRACT PACKAGING**

- 2.1.1 To facilitate the project management and implementation, the Project was divided by 5 works contracts as described in following. The details of each contract are summarized below and the delineation of each contract is shown in [Appendix A](#).

Contract 1 (Contract No. NE/2016/01)

- 2.1.2 Commencement date of Contract 1 was in late December 2016 and the major construction work was completed in June 2023. The major scope of work of Contract 1 is listed below:

- Formation of about 40 hectares (ha) of land platforms at the ARQ site and the associated geotechnical works;
- Road works including construction of approximately 3-kilometer long vehicular roads, footpaths, cycle tracks, an approximately 130-meter long underpass at the southern end and a public transport terminus at the northern end at the ARQ site;
- Provision of and improvement to water supply, drainage and sewerage systems as well as landscaping works; and
- Construction of proposed subway structures and lift tower structures of pedestrian connectivity facilities.

Contract 2 (Contract No. NE/2016/05)

- 2.1.3 Commencement date of Contract 2 was in March 2017 and the major construction work was completed in May 2023. The major Scope of Work of the Contract 2 is listed below:

- (i) Construction of the following pedestrian connectivity facilities with covered elevated walkways, covered at grade walkways, escalators, lift towers with associated staircase and lifts:-
 - (a) Linking Hiu Kwong street with Hiu Ming Street (E1)
 - (b) Linking the proposed “Footbridge Link at Sau Ming Road” with Hiu Ming Street (E2, C1 and E3)
 - (c) Linking the proposed bus-to-bus interchange at Tseung Kwan O Tunnel Toll Plaza with Lin Tak Road (E12)
- (ii) Construction of bus-to-bus interchange (BBI) at Tseung Kwan O Tunnel Toll Plaza;
- (iii) Associated landscape works

Contract 3 (Contract No. NE/2017/03)

- 2.1.4 The commencement date of Contract 3 was in May 2018 and the tentative completion date in September 2023. The major Scope of Work of the Contract 3 is listed below:

- (i) Site formation and road works in the following sections:-
 - (a) at junction of Clear Water Bay Road (CWBR) and On Sau Road constructed under the Development at Anderson Road (DAR) project including the provision of U-turn facility and noise mitigation measures (RIW1);
 - (b) at New Clear Water Bay Road (NCWBR) near Shun Lee Tsuen Road including the road widening works at NCWBR, modification of existing subway structure and provision of noise mitigation measures (RIW2); and
 - (c) at the junction of Lin Tak Road and Sau Mau Ping Road, construction of flyover above Tseung Kwan O Road, provision of loading and unloading bays along Lin Tak Road and noise mitigation measures (RIW3).
- (ii) Construction of the following pedestrian connectivity facilities with covered elevated walkways, escalators and lift towers with associated staircases and lifts:-
 - (a) linking Anderson Road Quarry site with the DAR Site (except the works covered under Contract 1) (System A and System B);
 - (b) linking Hiu Ming Street with Hiu Yuk Path (E8); and

- (c) linking the proposed bus-bus interchange at Tseung Kwan O Tunnel Toll Plaza with Sau Mau Ping Road (E11).
- (iii) Associated landscape works.

Contract 4 (Contract No. ED/2020/02)

2.1.5 The commencement date of Contract 4 is in July 2021 and tentative completion date in December 2023. The major Scope of Work of the Contract 4 is listed below:

- Hard landscaping and other ancillary works (e.g. paver footpath, planter walls, benches, lighting etc.)
- Soft landscaping works; landscape deck, emergency vehicular access, access road;
- Park lighting system;
- Electrical and mechanical engineering works for underground water treatment facilities and pumping system for Artificial Flood Attenuation Lake; and
- Potential slope enhancement requested by GEO.

Contract 5 (Contract No. ED/2019/02)

2.1.6 The commencement date of Contract 5 in March 2021 and tentative completion data in April 2024. The major Scope of Work of the Contract 5 is listed below:

- Construction pedestrian connectivity facility with covered elevated walkway, covered at grade walkway and escalators linking Sau Mau Ping Road with the existing covered elevated walkway to Po Tat Estate (E5);
- Construction a pedestrian connectivity facility with covered elevated walkway, covered at grade walkway and escalators linking Sau Mau Ping South Estate with the existing covered walkway to Sau Mau Ping Road (E6);
- Construction a pedestrian connectivity facility with covered elevated walkway, elevated walkway, lift tower with associated staircase and lifts linking Hiu Kwong Street with podium of Sau Ming House, Sau Mau Ping Estate, provision of at grade staircase (E7);
- Construction a pedestrian connectivity facility with covered elevated walkway, lift tower with associated staircase and lifts linking podium of Po Tat Estate to Sau Mau Ping Road (E10); and
- Ancillary works including electrical and mechanical, slope stabilization, drainage, utilities and landscaping works.

2.2 PROJECT ORGANIZATION

2.2.1 The project organization and contact details for Contracts 4 are shown in [**Appendix B**](#).

2.3 CONSTRUCTION PROGRESS

2.3.1 The 3-month rolling construction programme for Contracts 4 are shown in [**Appendix C**](#). The major construction activities conducted in the Reporting Period are summarized in below.

Contract 4 (ED/2020/02)

- Excavation work for Drainage Works at Portion 1a, 2a, 6, 8 & 12
- Drainage works at Portion 1a, 2a, 6, 8, 9 & 12
- Construction of E&M works at Portion 1a, 2a, 6, 8 & 12
- Construction of Planter at Portion 6, 8, 12
- Construction of hard landscape at Portion 6, 8, 12
- Construction of slab planter on elevated walkway at Portion 13b
- Backfilling works for B3 & B4 at Portion 13b
- Sewerage and Road works at G2-Site at Portion 13b
- Installation of rock mesh at Portion 10
- Repair works at Portion 10 and Portion 17

- Construction of Footpath at Portion 9
- Watermain works at Portion 13b
- Planting works at Portion 2a, 2b, 6, 8 and 12
- Scaffolding erection works for the buildings at Portion 2a
- Building works at Portion 2a

2.3.2 Summary of the relevant permits, licenses, and/or notifications on environmental protection for the Project of contracts 3, 4 and 5 are presented in **Tables 2-1**.

Table 2-1 Status of Environmental Licenses and Permits of the Contract 4

| Item | Description | License/Permit Status | | | Status | |
|------|---|--|--------------|----------------|--------|--|
| | | Permit no./ account no./ Ref. no. | Valid Period | | | |
| | | | From | To | | |
| 1 | Form NA – Notification pursuant to Air Pollution Control (Construction Dust) Regulation | EPD ref. no. 470496 | 19-Aug-21 | NA | Valid | |
| 2 | Waste Disposal Regulation – Billing Account for Disposal of Construction Waste | Account no. 7041336 | 6-Sep-21 | NA | Valid | |
| 3 | Chemical Waste Producer Registration | Registration no. WPN 5213-296-C1206-12 | 14-Sep-21 | End of project | Valid | |
| 4 | Water Pollution Control Ordinance – Discharge License | WT00043000-2003 | 30-Jan-23 | 31-Jan-28 | Valid | |

3. SUMMARY OF IMPACT MONITORING REQUIREMENTS

3.1 GENERAL

- 3.1.1 The Environmental Monitoring and Audit requirements are set out in the Approved EM&A manual. Environmental issues such as air quality, construction noise and water quality were identified as the key issues during the construction phase of the Project.
- 3.1.2 A summary of construction phase EM&A requirements are presented in the sub-sections below.

3.2 MONITORING PARAMETERS

- 3.2.1 The EM&A program of construction phase monitoring shall cover the following environmental issues:
- Air quality; and
 - Construction noise
- 3.2.2 A summary of the monitoring parameters is presented in *Table 3-1*.

Table 3-1 Summary of EM&A Requirements

| Environmental Issue | Parameters |
|---------------------|--|
| Air Quality | <ul style="list-style-type: none"> • 1-hour TSP by Real-Time Portable Dust Meter; and • 24-hour TSP by High Volume Air Sampler |
| Noise | <ul style="list-style-type: none"> • Leq(30min) in normal working days (Monday to Saturday) 07:00-19:00 except public holiday • Supplementary information for data auditing, statistical results such as L₁₀ and L₉₀ shall also be obtained for reference. |

3.3 MONITORING LOCATIONS

- 3.3.1 According to the EM&A Manual Section 4.6, seven (7) most representative and affected air sensitive receivers (ASR) were selected as air monitoring stations (AQM). During site visit at the subject site before the baseline monitoring, it was noted that some planned ASRs identified in the EM&A Manual are still under construction/ has not yet constructed and there were no suitable location to set up the high volume sampler to carry out the baseline 24-hour TSP monitoring. Therefore, a proposed change for the baseline monitoring programme was submitted and agreed by EPD before the baseline monitoring. The impact air quality monitoring locations are listed in *Table 3-2* and illustrated in *Appendix D*.

Table 3-2 Impact Monitoring Stations – Air Quality

| ID | ASR ID in EIA | Location in the EM&A Manual | Identified Location during Site Visit | Status |
|------------|---------------|--|--|--------------------|
| AMS-1 | ACYC-01 | Chi Yum Ching She | Ground of Chi Yum Ching facing the project site | Replaced by AMS-1a |
| AMS-1a (*) | ACYC-01 | Tan Shan Village No. 5 - 6 | Ground of Tan Shan Village No. 5 - 6 facing the project site | Active |
| AMS-2 (#) | DARB-13 | Block 8, Site B | Ground of Fung Tai House of On Tai Estate | Active |
| AMS-3 (:) | DARC-16 | Planned Clinic and Community Centre, Site C2 | Ground of Planned Clinic and Community Centre facing Anderson Road (Ancillary Facilities Building) | Active |
| AMS-4 (:) | DARC-26 | Planned School, Site C2 ^{Note 1} | Ground of Active | Active |
| AMS-5 | DARE-06 | Block 5, DAR Site E | Main roof of Oi Tat House of On Tat Estate facing the project site | Active |
| AMS-6 | DARE-17 | Block 9, Site E | Main roof of Hau Tat House of | Active |

| ID | ASR ID in EIA | Location in the EM&A Manual | Identified Location during Site Visit | Status |
|-------|---------------|-----------------------------|---|--------|
| | | | On Tat Estate facing the project site | |
| AMS-7 | AMYT-04 | Ma Yau Tong Village | Balcony at 2 nd floor of Village House Anderson Road No. 1 facing the project site | Active |

Note 1: The ASR is under construction.

(#) *AMS-2 was activated on 26 November 2018 since Fung Tai House became an air sensitive receiver. 1-hour TSP monitoring was commenced on 26 November 2018 while installation of HVS for 24-hour TSP was pending approval from Housing Authority.*

(*) *24-hour TSP monitoring at AMS1 was abandoned since May 2019 due to lack of power supply and the landlord was unreachable. The alternation location of AMS1a was activated on 15 June 2019 for 1-hour and 24-hour TSP monitoring. The proposal was agreed by EPD on 9 Aug 2019.*

(.) *AMS-3 was effective on 3 December 2019 and AMS-4 was effective on 4 January 2023*

Construction Noise

- 3.3.2 According to the EM&A Manual Section 5.5, three (3) most representative and affected noise sensitive receivers (NSR) were selected as monitoring stations. As recommended by the RE and agreed by IEC, one (1) additional noise monitoring location is proposed to add in Oi Tat House of On Tat Estate (hereafter “NMS-4”) to oversee the possible noise impact pose to the resident in On Tat Estate, which is an existing NSR close to the major works activities. Moreover, review of impact monitoring location was proposed to IEC in view of the current site condition and it was agreed by all parties. The details of noise monitoring location are listed in **Table 3-3** and illustrated in **Appendix D**.

Table 3-3 Impact Monitoring Stations – Construction Noise

| ID | NSR ID in EIA | Location | Status |
|----------|---------------------------------------|--|-----------|
| NMS-1(:) | Site C2 – School 05 ^{Note 1} | Ground of Maryknoll Secondary School | Active |
| NMS-2(:) | Site E – School | Rooftop of S.K.H. St. John’s Tsang Shiu Tim Primary School, where 1m from the exterior of the building facing the project site | Active |
| NMS-3(:) | Site C2 – R102– | Ground of Ancillary Facilities Building facing the project site | Active |
| NMS-4* | Oi Tat House | 1m from the exterior of ground floor façade of Oi Tat House of On Tat Estate facing the project site | Suspended |
| NMS-4a# | Oi Tat House | Rooftop of Oi Tat House where 1m from the exterior of Oi Tat House facing the project site | Active |
| NMS-5# | Hau Tat House | 22/F, refuge floor of Hau Tat House where 1m from the exterior of Hau Tat House facing the project site. | Active |
| NMS-6~ | Yung Tai House of On Tai Estate | Rooftop of Yung Tai House where 1m from the exterior of the building facing the project site) | Active |
| NMS-7~ | Chi Tai House of On Tai Estate | Rooftop of Chi Tai House where 1m from the exterior of the building facing the project site | Active |
| NMS-8^ | No. 3-4 Ma Yau Tong Village | 1m from the exterior of the building façade and facing the construction site | Active |

| ID | NSR ID in EIA | Location | Status |
|----|---------------|----------|--------|
|----|---------------|----------|--------|

Note 1: Construction of the NSR is not yet commenced.

- (*) Additional noise monitoring location was recommended by RE and agreed by IEC. It was temporary suspended and the monitoring location is relocated to NMS4a with effective on 15 Nov 2017.
- (:) NMS-2 was effective on 15 November 2019, NMS-3 was effective on 3 December 2019 and NMS-1 was effective on 4 January 2023.
- (#) Review of noise monitoring locations was proposed by ET and NMS-5 was effective on 15 November 2017.
- (/) Review of noise monitoring locations was proposed by ET and NMS-6 and NMS-7 were effective on 28 Feb 2018.
- (/) Review of noise monitoring locations was proposed by ET and NMS-8 was effective on 18 April 2018. Noise monitoring at NMS-8 was started on 3 May 2018 upon commencement of construction at relevant section.

Addition Construction Noise Monitoring Location

- 3.3.3 A Work Instruction was issued from AECOM to AUES in November 2018 for installing three additional noise monitoring stations under Contract 3. According to the Work Instruction, one noise monitoring station was proposed to install at System A Area and two station monitoring points were proposed to install at E8 Area. The noise monitoring locations are shown in **Table 3-4** below and illustrated in **Appendix D**.

Table 3-4 Additional Impact Monitoring Stations – Construction Noise

| ID | Location | Description |
|------|-------------------------------|---|
| CN1* | Holm Glad College | Ground floor of Holm Glad College, where 1m from the exterior of the building facing E8 |
| CN2* | Leung Shek Chee College | Ground floor of Leung Shek Chee College, where 1m from the exterior of the building facing E8 |
| CN3 | Oi Tat House of On Tat Estate | Ground floor of Oi Tat House of On Tat Estate, where 1m from the exterior of the building facing System A |

Note 1: Construction of the NSR is not yet commenced.

- (*) Additional noise monitoring location was terminated by RE as the construction work at E8 was completed in September 2022. The last monitoring for CN1&CN2 was on 15 September 2022.

3.4 MONITORING FREQUENCY AND PERIOD

- 3.4.1 The requirements of impact monitoring in the approved *EM&A Manual* and presented as follows.

Air Quality Monitoring

- 3.4.2 Frequency of impact air quality monitoring is as follows:

- 1-hour TSP 3 times every six days during course of works throughout the construction period
- 24-hour TSP Once every 6 days during course of works throughout the construction period

Noise Monitoring

- 3.4.3 Noise monitoring will be to conduct at the all available designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:

- one set of $Leq_{(30min)}$ measurements between 07:00 and 19:00 hours on normal weekdays

3.5 MONITORING EQUIPMENT

Air Quality Monitoring

- 3.5.1 The 24-hour and 1-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the *Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50)*, Appendix B. If the ET proposes to use a direct reading dust meter to measure 1-hour TSP levels, it shall submit sufficient information to the IEC to prove that the instrument is capable of achieving a comparable results to the HVS. The instrument should be calibrated regularly, and the 1-hour sampling shall be determined on yearly basis by the HVS to check the validity and accuracy of the results measured by direct reading method. The filter paper of 24-hour TSP measurement shall be determined by HOKLAS accredited laboratory.

- 3.5.2 All equipment to be used for air quality monitoring is listed in **Table 3-5**.

Table 3-5 Air Quality Monitoring Equipment

| Equipment | | Model |
|-------------|-------------------------|--|
| 24-hour TSP | High Volume Air Sampler | TISCH High Volume Air Sampler, HVS Model TE-5170 |
| | Calibration Kit | TISCH Model TE-5025A |
| 1- hour TSP | Portable Dust Meter | Sibata LD-3B, Sibata LD-5R Laser Dust Monitor |

Noise Monitoring

- 3.5.3 Sound level meter in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. The sound level meter shall be checked using an acoustic calibrator. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in ms-1.

- 3.5.4 Noise equipment as perform for construction phase monitoring is listed in **Table 3-6**.

Table 3-6 Construction Noise Monitoring Equipment

| Equipment | Model |
|-------------------------------|---|
| Integrating Sound Level Meter | Brue & Kjaer 2238, Rion NL-31, Rion NL-52 |
| Calibrator | Brue & Kjaer 4231, NC-75 |
| Portable Wind Speed Indicator | Anemometer AZ Instrument 8908 |

3.6 MONITORING METHODOLOGY

1-hour TSP

- 3.6.1 The 1-hour TSP monitor was a brand named “Sibata LD-3 Laser Dust monitor Particle Mass Profiler & Counter” which is a portable, battery-operated laser photometer. The 1-hour TSP meter provides a real time 1-hour TSP measurement based on 90° light scattering. The 1-hour TSP monitor consists of the following:
- A pump to draw sample aerosol through the optic chamber where TSP is measured;
 - A sheath air system to isolate the aerosol in the chamber to keep the optics clean for maximum reliability; and
 - A built-in data logger compatible with Windows based program to facilitate data collection, analysis and reporting.

- 3.6.2 The 1-hour TSP meter to be used will be within the valid period, calibrated by the manufacturer prior to purchasing. Zero response of the instrument will be checked before and after each monitoring event.

24-hour TSP

- 3.6.3 The equipment used for 24-hour TSP measurement is Thermo Andersen Model GS2310 TSP high volume air sampling system, which complied with *EPA Code of Federal Regulation, Appendix B to Part 50*. The High Volume Air Sampler (HVS) consists of the following:
- (a.) An anodized aluminum shelter;
 - (b.) A 8"x10" stainless steel filter holder;
 - (c.) A blower motor assembly;
 - (d.) A continuous flow/pressure recorder;
 - (e.) A motor speed-voltage control/elapsed time indicator;
 - (f.) A 7-day mechanical timer, and
 - (g.) A power supply of 220v/50 Hz
- 3.6.4 For HVS for 24-hour TSP monitoring, the HVS is mounted in a metallic cage with a top for protection and also it is sat on the existing ground or the roof of building. The flow rate of the HVS between $0.6\text{m}^3/\text{min}$ and $1.7\text{m}^3/\text{min}$ will be properly set in accordance with the manufacturer's instruction to within the range recommended in *EPA Code of Federal Regulation, Appendix B to Part 50*. Glass Fiber Filter 8" x 10" of TE-653 will be used for 24-Hour TSP monitoring and would be supplied by laboratory. The general procedures of sampling are described as below:-
- A horizontal platform with appropriate support to secure the samples against gusty wind should be provided;
 - No two samplers should be placed less than 2 meters apart;
 - The distance between the sampler and an obstacle, such as building, must be at least twice the height that the obstacle protrudes above the sample;
 - A minimum of 2 meters of separation from any supporting structure, measured horizontally is required;
 - Before placing any filter media at the HVS, the power supply will be checked to ensure the sampler work properly;
 - The filter paper will be set to align on the screen of HVS to ensure that the gasket formed an air tight seal on the outer edges of the filter. Then filter holder frame will be tightened to the filter hold with swing bolts. The holding pressure should be sufficient to avoid air leakage at the edge;
 - The mechanical timer will be set for a sampling period of 24 hours (00:00 mid-night to 00:00 mid-night next day). Information will be recorded on the field data sheet, which would be included the sampling data, starting time, the weather condition at current and the filter paper ID with the initial weight;
 - After sampling, the filter paper will be collected and transfer from the filter holder of the HVS to a sealed envelope and sent to a local HOKLAS accredited laboratory for quantifying.
- 3.6.5 All the sampled 24-hour TSP filters will be kept in normal air conditioned room conditions, i.e. 70% HR (Relative Humidity) and 25°C , for six months prior to disposal.
- 3.6.6 The HVS used for 24-hour TSP monitoring will be calibrated before the commencement for sampling, and after in two months interval for 1 point checking of maintenance and six months interval for five points calibrate in accordance with the manufacturer's instruction using the NIST-certified standard calibrator (Tisch Calibration Kit Model TE-5025A) to establish a relationship between the follow recorder meter reading in cfm (cubic feet per minute) and the standard flow rate, Qstd, in m^3/min . Motor brushes of HVS will be regularly replaced of about five hundred hours per time. The calibration certificates of all monitoring equipment used for the impact monitoring program in the Reporting Period and the HOKLAS accredited certificate of laboratory are attached in [*Appendix E*](#).

Noise Monitoring

- 3.6.7 As referred to in the Technical Memorandum (TM) issued under the NCO, sound level meters

in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804:1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

- 3.6.8 All noise measurements will be performed with the meter set to FAST response and on the A-weighted equivalent continuous sound pressure level (Leq). Leq_(30 min) in six consecutive Leq_(5 min) measurements will be used as the monitoring parameter for the time period between 07:00-19:00 hours on weekdays throughout the construction period.
- 3.6.9 The sound level meter will be mounted on a tripod at a height of 1.2 m and placed at the assessment point and oriented such that the microphone is pointed to the site with the microphone facing perpendicular to the line of sight. The windshield will be fitted for all measurements. Where a measurement is to be carried out at a building, the assessment point would normally be at a position 1 m from the exterior of the building façade. Where a measurement is to be made for noise being received at a place other than a building, the assessment point would be at a position 1.2 m above the ground in a free-field situation, i.e. at least 3.5 m away from reflective surfaces such as adjacent buildings or walls.
- 3.6.10 Immediately prior to and following each noise measurement the accuracy of the sound level meter will be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements will be accepted as valid only if the calibration level from before and after the noise measurement agrees to within 1.0 dB.
- 3.6.11 Noise measurements will not be made in fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s. The wind speed will be checked with a portable wind speed meter capable of measuring the wind speed in m/s.
- 3.6.12 The sound level meter and calibrator are calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme at yearly basis. The calibration certificates of all monitoring equipment used for the impact monitoring program in the Reporting Period is attached in [Appendix E](#).

Meteorological Information

- 3.6.13 The meteorological information including wind direction, wind speed, humidity, rainfall, air pressure and temperature etc. during baseline monitoring is extracted from the closest Hong Kong Observatory Station. To obtain the most appropriate meteorological information where available, the data of temperature is extracted from the Kwun Tong Observatory Station; the data of wind speed and wind direction are extracted from Kai Tak Observatory Station and the data of humidity is extracted from King's Park Station.

3.7 DERIVATION OF ACTION/LIMIT (A/L) LEVELS

- 3.7.1 The baseline results form the basis for determining the environmental acceptance criteria for the impact monitoring. According to the approved Environmental Monitoring and Audit Manual, the air quality, construction noise were set up, namely Action and Limit levels are listed in **Tables 3-7 and 3-8**.

Table 3-7 Action and Limit Levels for Air Quality Monitoring

| Monitoring Station | Action Level ($\mu\text{g}/\text{m}^3$) | | Limit Level ($\mu\text{g}/\text{m}^3$) | |
|--------------------|---|-------------|--|-------------|
| | 1-hour TSP | 24-hour TSP | 1-hour TSP | 24-hour TSP |
| AMS-1 | 313 | 154 | 500 | 260 |
| AMS-1a(*) | 313 | 154 | 500 | 260 |
| AMS-2 | 319 | 165 | 500 | 260 |
| AMS-3 | 319 | 165 | 500 | 260 |

| Monitoring Station | Action Level ($\mu\text{g}/\text{m}^3$) | | Limit Level ($\mu\text{g}/\text{m}^3$) | |
|--------------------|---|-------------|--|-------------|
| | 1-hour TSP | 24-hour TSP | 1-hour TSP | 24-hour TSP |
| AMS-4 | 315 | 165 | 500 | 260 |
| AMS-5 | 299 | 166 | 500 | 260 |
| AMS-6 | 303 | 168 | 500 | 260 |
| AMS-7 | 307 | 156 | 500 | 260 |

(*) 24-hour TSP monitoring at AMS1 was abandoned since May 2019 due to lack of power supply and the landlord was unreachable. The alternative location of AMS1a was activated on 15 June 2019 for 1-hour and 24-hour TSP monitoring. The proposal was agreed by EPD on 9 Aug 2019.

Table 3-8 Action and Limit Levels for Construction Noise

| Monitoring Location | Action Level | Limit Level in dB(A) |
|---------------------|---|---|
| | Time Period: 0700-1900 hours on normal weekdays | |
| NMS-1 | | 70 dB(A) ^{Note 1} / 65 dB(A) ^{Note 1} |
| NMS-2(@) | | 75 dB(A) |
| NMS-3(:) | | 75 dB(A) |
| NMS-4* | | 75 dB(A) |
| NMS-4a# | | 75 dB(A) |
| NMS-5# | | 75 dB(A) |
| NMS-6~ | | 75 dB(A) |
| NMS-7~ | | 75 dB(A) |
| NMS-8^ | | 75 dB(A) |
| CN1+ | | 70 dB(A) ^{Note 1} / 65 dB(A) ^{Note 1} |
| CN2+ | | 70 dB(A) ^{Note 1} / 65 dB(A) ^{Note 1} |
| CN3+ | | 75 dB(A) |

Note 1: Noise Limit Levels for school is 70dB(A) and should be reduced to 65dB(A) during examination period.

Note: If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

Remark: (*) Additional noise monitoring location was recommended by RE and agreed by IEC. It was temporary suspended and the monitoring location is relocated to NMS4a with effective on 15 Nov 2017.

(@) NMS-2 was effective on 15 November 2019.

(:) NMS-3 was effective on 3 December 2019

(#) Review of noise monitoring locations was proposed by ET and NMS-5 was effective on 15 Nov 2017.

(~) Review of noise monitoring locations was proposed by ET and NMS-6 and NMS-7 were effective on 28 Feb 2018.

(^) Review of noise monitoring locations was proposed by ET and NMS-8 was effective on 18 April 2018. Noise monitoring at NMS-8 was started on 3 May 2018 upon commencement of construction at relevant section.

(+) Additional noise monitoring locations as instructed by AECOM which effective in Dec 18.

- 3.7.2 Should non-compliance of the environmental quality criteria occurs, remedial actions will be triggered according to the Event and Action Plan which presented in [Appendix F](#).

3.8 DATA MANAGEMENT AND DATA QA/QC CONTROL

- 3.8.1 All monitoring data will be handled by the ET's in-house data recording and management system. The monitoring data recorded in the equipment will be downloaded directly from the equipment at the end of each monitoring day. The downloaded monitoring data will input into a computerized database properly maintained by the ET. The laboratory results will be input directly into the computerized database and checked by personnel other than those who input the data.
- 3.8.2 For monitoring parameters that require laboratory analysis, the local laboratory shall follow the QA/QC requirements as set out under the HOKLAS scheme for the relevant laboratory tests.

4 AIR QUALITY MONITORING

4.1 GENERAL

- 4.1.1 In the Reporting Period, air quality monitoring was performed at the active designated monitoring locations AMS-1a, AMS-2, AMS-3, AMS-4, AMS-5, AMS-6 and AMS-7. Since installation of HVS for 24-hour TSP at AMS-2, AMS-3 and AMS-4 were pending approval from relevant departments, only 1-hour TSP monitoring was conducted at AMS-2, AMS-3 and AMS-4. Liaise with the Maryknool Secondary School of AMS-4 for installation of monitoring equipment at rooftop is in progress.
- 4.1.2 The air quality monitoring schedule is presented in *Appendix G* and the monitoring results are summarized in the following sub-sections.

4.2 RESULTS OF AIR QUALITY MONITORING

- 4.2.1 In the Reporting Period, a total of **105** events of 1-hour TSP monitoring and **20** events of 24-hours TSP were carried out and the monitoring results are summarized in *Tables 4-1 to 4-5*. The detailed 24-hour TSP monitoring data are presented in *Appendix H* and the relevant graphical plots are shown in *Appendix I*.

Table 4-1 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-1a)

| Date | 24-hour TSP ($\mu\text{g}/\text{m}^3$) | 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|--------------------|--|---|---------------|-------------------------------|----------------------------|----------------------------|
| | | Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 3-Nov-25 | 32 | 1-Nov-25 | 9:00 | 49 | 60 | 54 |
| 8-Nov-25 | 20 | 7-Nov-25 | 9:16 | 68 | 62 | 57 |
| 14-Nov-25 | 28 | 13-Nov-25 | 9:00 | 56 | 63 | 60 |
| 20-Nov-25 | 36 | 19-Nov-25 | 9:00 | 60 | 62 | 66 |
| 26-Nov-25 | 56 | 25-Nov-25 | 9:00 | 56 | 52 | 58 |
| Average (Range) | 34 (20 – 56) | Average (Range) | | 59 (49 – 68) | | |

Table 4-2 Summary of 1-hour TSP Monitoring Results (AMS-2)

| 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|---|------------|-------------------------|-------------------------|-------------------------|
| Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 1-Nov-25 | 9:40 | 64 | 68 | 64 |
| 7-Nov-25 | 9:15 | 70 | 64 | 56 |
| 13-Nov-25 | 9:15 | 64 | 60 | 58 |
| 19-Nov-25 | 9:15 | 70 | 64 | 56 |
| 25-Nov-25 | 9:15 | 68 | 64 | 62 |
| Average (Range) | | 63 (56 – 70) | | |

Table 4-3 Summary of 1-hour TSP Monitoring Results (AMS-3)

| 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|---|------------|-------------------------|-------------------------|-------------------------|
| Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 1-Nov-25 | 9:25 | 64 | 60 | 62 |
| 7-Nov-25 | 9:00 | 58 | 50 | 53 |
| 13-Nov-25 | 9:30 | 58 | 64 | 60 |
| 19-Nov-25 | 9:30 | 60 | 64 | 62 |
| 25-Nov-25 | 9:30 | 64 | 66 | 60 |
| Average (Range) | | 60 (50 – 66) | | |

Table 4-4 Summary of 1-hour TSP Monitoring Results (AMS-4)

| 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|---|------------|-------------------------|-------------------------|-------------------------|
| Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 1-Nov-25 | 9:50 | 70 | 64 | 67 |
| 7-Nov-25 | 9:00 | 68 | 56 | 64 |
| 13-Nov-25 | 10:00 | 72 | 68 | 60 |
| 19-Nov-25 | 9:50 | 70 | 64 | 67 |
| 25-Nov-25 | 9:55 | 68 | 70 | 60 |
| Average (Range) | | 66 (56 – 72) | | |

Table 4-5 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-5)

| Date | 24-hour TSP ($\mu\text{g}/\text{m}^3$) | 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|-----------------|--|---|------------|-------------------------|-------------------------|-------------------------|
| | | Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 3-Nov-25 | 26 | 1-Nov-25 | 13:00 | 68 | 54 | 58 |
| 8-Nov-25 | 22 | 7-Nov-25 | 9:40 | 54 | 60 | 68 |
| 14-Nov-25 | 25 | 13-Nov-25 | 13:00 | 64 | 66 | 68 |
| 20-Nov-25 | 32 | 19-Nov-25 | 13:00 | 68 | 62 | 64 |
| 26-Nov-25 | 80 | 25-Nov-25 | 13:00 | 66 | 62 | 58 |
| Average (Range) | 37 (22 – 80) | Average (Range) | | 63 (54 – 68) | | |

Table 4-6 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-6)

| Date | 24-hour TSP ($\mu\text{g}/\text{m}^3$) | 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|-----------------|--|---|------------|-------------------------|-------------------------|-------------------------|
| | | Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 3-Nov-25 | 46 | 1-Nov-25 | 10:40 | 51 | 63 | 55 |
| 8-Nov-25 | 37 | 7-Nov-25 | 10:30 | 60 | 58 | 53 |
| 14-Nov-25 | 41 | 13-Nov-25 | 13:15 | 56 | 52 | 62 |
| 20-Nov-25 | 56 | 19-Nov-25 | 13:15 | 60 | 68 | 58 |
| 26-Nov-25 | 99 | 25-Nov-25 | 10:40 | 54 | 63 | 67 |
| Average (Range) | 56 (37 – 99) | Average (Range) | | 59 (51 – 68) | | |

Table 4-7 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-7)

| Date | 24-hour TSP ($\mu\text{g}/\text{m}^3$) | 1-hour TSP ($\mu\text{g}/\text{m}^3$) | | | | |
|-----------------|--|---|------------|-------------------------|-------------------------|-------------------------|
| | | Date | Start Time | 1 st reading | 2 nd reading | 3 rd reading |
| 3-Nov-25 | 12 | 1-Nov-25 | 14:25 | 70 | 72 | 64 |
| 8-Nov-25 | 47 | 7-Nov-25 | 14:30 | 68 | 70 | 56 |
| 14-Nov-25 | 60 | 13-Nov-25 | 14:05 | 64 | 68 | 70 |
| 20-Nov-25 | 53 | 19-Nov-25 | 14:00 | 69 | 72 | 66 |
| 26-Nov-25 | 20 | 25-Nov-25 | 14:00 | 60 | 58 | 69 |
| Average (Range) | 38 (12 – 60) | Average (Range) | | 66 (56 – 72) | | |

- 4.2.2 As shown in **Tables 4-1 to 4-7**, all the 1-hour TSP and 24-hour TSP monitoring results in the Reporting Period were below the Action and Limit Levels. No Notification of Exceedance (NOE) was issued in this Reporting Period.
- 4.2.3 The meteorological data during the impact monitoring days are summarized in **Appendix J**.

5 CONSTRUCTION NOISE MONITORING

5.1 GENERAL

- 5.1.1 In the Reporting Period, noise monitoring was performed at designated monitoring locations NMS1, NMS2 and NMS3 and the additional monitoring locations NMS4a, NMS5, NMS6, NMS7 and NMS8.
- 5.1.2 In addition, a Work Instruction was issued from AECOM to AUES in November 2018 for installing three additional noise monitoring stations, i.e., CN1, CN2 and CN3 for Contract 3. Impact noise monitoring was performed at the three additional noise monitoring locations since December 2018. Additional noise monitoring location was terminated by RE as the construction work at E8 was completed in September 2022. The last monitoring for CN1 & CN2 was on 15 September 2022.
- 5.1.3 The noise monitoring schedule is presented in *Appendix G* and the monitoring results are summarized in the following sub-sections.

5.2 NOISE MONITORING RESULTS IN REPORTING MONTH

- 5.2.1 In the Reporting Period, a total of **32** events noise measurements were carried out at the designated locations under Contract 1. The noise monitoring results at the designated locations are summarized in *Tables 5-1*. The detailed noise monitoring data are presented in *Appendix H* and the relevant graphical plots are shown in *Appendix I*.

Table 5-1 Summary of Construction Noise Monitoring Results for Contract 1

| Construction Noise Level ($L_{eq30min}$), dB(A) | | | | | | | | |
|---|---|------|-----------------|-------|------|------|------|------|
| Date | NMS1 | NMS2 | NMS3 | NMS4a | NMS5 | NMS6 | NMS7 | NMS8 |
| 7-Nov-25 | 68 | 61 | 63 | 63 | 64 | 67 | 64 | 63 |
| 13-Nov-25 | 68 | 62 | 62 | 66 | 64 | 68 | 64 | 64 |
| 19-Nov-25 | 70 | 64 | 64 | 62 | 63 | 67 | 64 | 63 |
| 25-Nov-25 | 70 | 65 | 59 | 64 | 63 | 66 | 62 | 63 |
| Limit Level | 70 dB(A) / 65 dB(A)^{Note 1} | | 75 dB(A) | | | | | |

Note 1: Noise Limit Levels for school is 70dB(A) and should be reduced to 65dB(A) during examination period

* NMS1 examination period: 25 to 28 November 2025

NMS2 examination period: 20 to 21, 24 to 25 November 2025

- 5.2.2 As shown in above table, the noise measurement result at NMS1 on 25 November 2025 was 70dB(A), which exceeded the Limit Level. The baseline noise level measured at NMS1 was 69.0dB(A), and baseline noise correction should be applied to the impact monitoring result, where exceedance occurred. With reference to the baseline, the corrected construction noise level at NMS1 on 25 November 2025 is 63.1dB(A), which fall within the Limit Level.

- 5.2.3 For the additional noise monitoring under Contract 3, a total of **4** events noise measurements were performed for the Contract. The noise monitoring results are summarized in *Tables 5-2*. The detailed noise monitoring data are presented in *Appendix H* and the relevant graphical plots are shown in *Appendix I*.

Table 5-2 Summary of Construction Noise Monitoring Results for Contract 3

| Construction Noise Level ($L_{eq30min}$), dB(A) | |
|---|-----------------|
| Date | CN3 |
| 7-Nov-25 | 62 |
| 13-Nov-25 | 62 |
| 19-Nov-25 | 66 |
| 25-Nov-25 | 62 |
| Limit Level | 75 dB(A) |

Note 1: Noise Limit Levels for school is 70dB(A) and should be reduced to 65dB(A) during examination period.

- 5.2.4 As shown in **Tables 5-1 and 5-2**, no Limit Level exceedance was recorded in this Reporting Period. No noise complaint (which triggered Action level exceedance) was received under the Project.

6 WASTE MANAGEMENT

6.1 GENERAL WASTE MANAGEMENT

6.1.1 Waste management was carried out by an on-site Environmental Officer or an Environmental Supervisor from time to time.

6.2 RECORDS OF WASTE QUANTITIES

6.2.1 All types of waste arising from the construction work are classified into the following:

- Construction & Demolition (C&D) Material;
- Chemical Waste;
- General Refuse; and
- Excavated Soil.

6.2.2 The quantities of waste for disposal in this Reporting Period are summarized in **Tables 6-1** and **6-2** and the Monthly Summary Waste Flow Table is shown in **Appendix K**. Whenever possible, materials were reused on-site as far as practicable.

Table 6-1 Summary of Quantities of Inert C&D Materials

| Type of Waste | Contract 4 | |
|---|------------|-------------------|
| | Quantity | Disposal Location |
| Total generated Inert C&D Materials ('000m ³) (#) | 1.243 | - |
| Hard Rock and Large Broken Concrete ('000m ³) | 0 | - |
| Reused in this Contract (Inert) ('000m ³) | 0 | - |
| Reused in other Projects (Inert) ('000m ³) | 0 | - |
| Disposal as Public Fill (Inert) ('000m ³) | 1.243 | TKO 137 |

Remark (#): The total generated inert C&D materials will not take account for the hard rock and large broken concrete.

() Approved alternative disposal ground.*

Table 6-2 Summary of Quantities of C&D Wastes

| Type of Waste | Contract 4 | |
|---|------------|-------------------|
| | Quantity | Disposal Location |
| Recycled Metal ('000kg) | 0 | - |
| Recycled Paper / Cardboard Packing ('000kg) | 0 | - |
| Recycled Plastic ('000kg) | 0 | - |
| Chemical Wastes ('000kg) | 0 | - |
| General Refuses ('000m ³) | 0.296 | - |

7 SITE INSPECTION**7.1 REQUIREMENTS**

- 7.1.1 According to the approved EM&A Manual, the environmental site inspection shall be formulation by ET Leader. Weekly environmental site inspections should be carried out to confirm the environmental performance.

7.2 FINDINGS / DEFICIENCIES DURING THE REPORTING MONTH***Contract 4***

- 7.2.1 In the Reporting Period, joint site inspections for Contract 4 to evaluate site environmental performance were carried out by the RE, ET and the Contractor on **5, 10, 20 and 26 November 2025** in which IEC joined the site inspection with SSEMC on **20 November 2025**. No non-compliance was noted. The findings / deficiencies of **Contract 4** that observed during the weekly site inspection are listed in **Table 7-1**.

Table 7-1 Site Observations of Contract 4

| Date | Findings / Deficiencies | Follow-Up Status |
|------------------|---|--|
| 5 November 2025 | <ul style="list-style-type: none"> The Contractor was reminded to provide mitigation measures to minimize dust impact on site. | <ul style="list-style-type: none"> Reminder only. |
| 10 November 2025 | <ul style="list-style-type: none"> No environmental issue was observed during site inspection. | <ul style="list-style-type: none"> NA |
| 20 November 2025 | <ul style="list-style-type: none"> No environmental issue was observed during site inspection. | <ul style="list-style-type: none"> NA |
| 26 November 2025 | <ul style="list-style-type: none"> No environmental issue was observed during site inspection. | <ul style="list-style-type: none"> NA |

8 ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE**8.1 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION**

- 8.1.1 In the Reporting Period, no environmental complaint was received. Besides, no summons and prosecution under the EM&A Programme was lodged for the project.
- 8.1.2 The complaint log is shown in *Appendix M*.
- 8.1.3 The statistical summary table of environmental complaint, summons and prosecution is presented in **Tables 8-1, 8-2 and 8-3**.

Table 8-1 Statistical Summary of Environmental Complaints

| Reporting Period | Contract no. | Environmental Complaint Statistics | | |
|-------------------------------|--------------|------------------------------------|------------|------------------|
| | | Frequency | Cumulative | Complaint Nature |
| 27 Sep 2021 – 31 October 2025 | 4 | 0 | 13 | NA |
| | 1 | 0 | 70 | NA |
| | 2 | 0 | 10 | NA |
| | 3 | 0 | 9 | NA |
| | 4 | 0 | 13 | NA |
| | 5 | 0 | 0 | NA |

Table 8-2 Statistical Summary of Environmental Summons

| Reporting Period | Contract no. | Environmental Summons Statistics | | |
|-------------------------------|--------------|----------------------------------|------------|----------------|
| | | Frequency | Cumulative | Summons Nature |
| 27 Sep 2021 – 31 October 2025 | 4 | 0 | 0 | NA |
| | 1 | 0 | 0 | NA |
| | 2 | 0 | 0 | NA |
| | 3 | 0 | 0 | NA |
| | 4 | 0 | 0 | NA |
| | 5 | 0 | 0 | NA |

Table 8-3 Statistical Summary of Environmental Prosecution

| Reporting Period | Contract no. | Environmental Prosecution Statistics | | |
|-------------------------------|--------------|--------------------------------------|------------|--------------------|
| | | Frequency | Cumulative | Prosecution Nature |
| 27 Sep 2021 – 31 October 2025 | 4 | 0 | 0 | NA |
| | 1 | 0 | 0 | NA |
| | 2 | 0 | 0 | NA |
| | 3 | 0 | 0 | NA |
| | 4 | 0 | 0 | NA |
| | 5 | 0 | 0 | NA |

9 IMPLEMENTATION STATUS OF MITIGATION MEASURES**9.1 GENERAL REQUIREMENTS**

- 9.1.1 The environmental mitigation measures that recommended in the Implementation Schedule for Environmental Mitigation Measures (ISEMM) in the approved EM&A Manual covered the issues of dust, noise, water and waste and they are summarized presented in [**Appendix L**](#).
- 9.1.2 All contracts under the Project shall be implementing the required environmental mitigation measures according to the approved EM&A Manual as subject to the site condition. Environmental mitigation measures generally implemented in this Reporting Period are summarized in **Table 9-1**.

Table 9-1 Environmental Mitigation Measures

| Issues | Environmental Mitigation Measures |
|-------------------------------|--|
| Water Quality | <ul style="list-style-type: none"> Wastewater to be treated by filtration system; such as, silt curtain or sedimentation tank before discharge. Replace silt curtain materials if necessary |
| Air Quality | <ul style="list-style-type: none"> Maintain damp / wet surface on access road Keep slow speed in the sites All vehicles must use wheel washing facility before off site All vehicles must use wheel washing facility before off site Sprayed water during breaking works |
| Noise | <ul style="list-style-type: none"> Restrain operation time of plants from 07:00 to 19:00 on any working day except for Public Holiday and Sunday. Keep good maintenance of plants Place noisy plants away from residence or school Provide noise barriers or hoarding to enclose the noisy plants or works Shut down the plants when not in used. |
| Waste and Chemical Management | <ul style="list-style-type: none"> On-site sorting prior to disposal Follow requirements and procedures of the “Trip-ticket System” Predict required quantity of concrete accurately Collect the unused fresh concrete at designated locations in the sites for subsequent disposal |
| General | <ul style="list-style-type: none"> The site was generally kept tidy and clean. |

9.2 TENTATIVE CONSTRUCTION ACTIVITIES IN THE COMING MONTH**Contract 4 (ED/2020/02)**

- Excavation work for Drainage Works at Portion 1a, 2a, 6 ,8 & 12
- Drainage works at Portion 1a, 2a, 6 ,8, 9 & 12
- Construction of E&M works at Portion 1a, 2a, 6, 8, 12
- Construction of Planter at Portion 6, 8, 12
- Construction of hard landscape at Portion 6, 8, 12
- Construction of slab planter on elevated walkway at Portion 13b
- Backfilling works for B3 &B4 at Portion 13b
- Sewerage and Road works at G2-Site at Portion 13b
- Installation of rock mesh at Portion 10
- Repair works at Portion 10 and Portion 17
- Construction of Footpath at Portion 9
- Watermain works at Portion 13b
- Planting works at Portion 2a, 2b, 6, 8 and 12
- Scaffolding erection works for the buildings at Portion 2a
- Building works at Portion 2a

9.3 KEY ISSUES FOR THE COMING MONTH

- 9.3.1 Key issues to be considered in the coming month include:
- Implementation of dust suppression measures at all times;
 - Potential wastewater quality impact due to surface runoff;
 - Potential fugitive dust quality impact due from the dry/loose/exposure soil surface/dusty material;
 - Disposal of empty engine oil containers within site area;
 - Ensure dust suppression measures are implemented properly;
 - Sediment catch-pits and silt removal facilities should be regularly maintained;
 - Management of chemical wastes;
 - Discharge of site effluent to the nearby wetland, stockpiling or disposal of materials, and any dredging or construction area at this area are prohibited;
 - Follow-up of improvement on general waste management issues; and
 - Implementation of construction noise preventative control measures
- 9.3.2 During dry season, the Contractor should fully implement air quality mitigation measures to reduce construction dust emission as far as practicable. Furthermore, since construction site is highly visible to the resident at nearby estates, noise mitigation measures such as using of quiet plants should be implemented in accordance with the EM&A requirement.
- 9.3.3 The Contractors should pay special attention on water quality mitigation measures and fully implement according to the ISEMM of the EM&A Manual, in particular to prevent muddy water or other water pollutants from site surface overflow to public area should be properly maintained. The implementation of water quality mitigation measures conducted by the Contractor is shown in *Appendix N*.

10 CONCLUSIONS AND RECOMMENDATIONS

10.1 CONCLUSIONS

- 10.1.1 This is **104th** monthly EM&A report presenting the monitoring results and inspection findings for the Reporting Period from **1 to 30 November 2025**.
- 10.1.2 The previous service contractor nos. NTE/07/2016 and EDO 8/2022, covering the EM&A service for the Development ARQ for Contracts 1, 2, 3, 4 and 5 was completed in September 2022 and September 2023 respectively. In view of the completion of major construction works, the EM&A service for Contract 1 and Contract 2 under service contract no. EDO 8/2022 was ceased in late September 2023 and the relevant monitoring stations have been handed over to current contract no. EDO 8/2022.
- 10.1.3 No 24-hour and 1-hour TSP monitoring and noise monitoring results that triggered the Action or Limit Levels were recorded. No NOEs or the associated corrective actions were therefore issued. Moreover, no noise complaints (which triggered Action Level) were received for the Project.
- 10.1.4 In the Reporting Period, no environmental complaint was received in Reporting Period.
- 10.1.5 No notification of summons or successful prosecution was received under the Project.
- 10.1.6 During the Reporting Period, weekly joint site inspection by the RE, ET with the relevant Main-contractor was carried out for Contracts 4 in accordance with the EM&A Manual stipulation whereas IEC performed monthly site inspection for both contracts. No non-compliance observed during the site inspection.

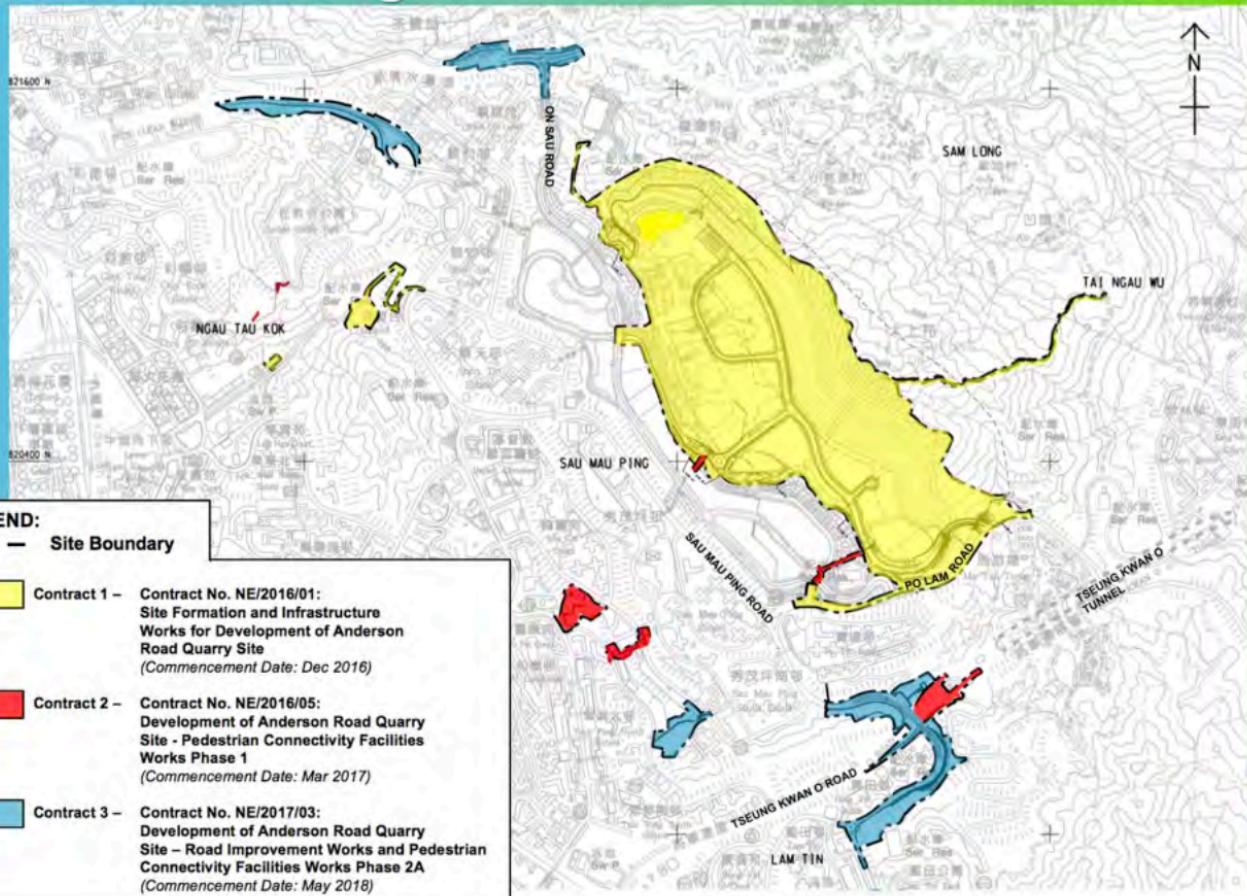
10.2 RECOMMENDATIONS

- 10.2.1 The Contractors are reminded to pay special attention on water quality mitigation measures and should fully implement the measures as recommended in the EM&A Manual, in particular to prevent muddy water or other water pollutants from site surface overflow to public area should be properly maintained.
- 10.2.2 Since construction site is highly visible to the resident at nearby estates, the Contractors should pay special attention on potential environmental impact generated by the site activities and adhere implement adequate air quality and noise mitigation measures as far as practicable to reduce the impact to the public.
- 10.2.3 Construction noise is one of the key environmental issues during construction work of the Project. Noise mitigation measures such as using quiet plants and noise barriers shall be implemented where practicable according to the EM&A manual.
- 10.2.4 In addition, the Contractors should ensure all effluent discharge shall be fulfilled the Technical Memorandum of Effluent Discharged into Drainage and Sewerage Systems, inland and Coastal Waters criteria or relevant discharge license requirement.
- 10.2.5 Mosquito control measures should be continued to prevent mosquito breeding on site

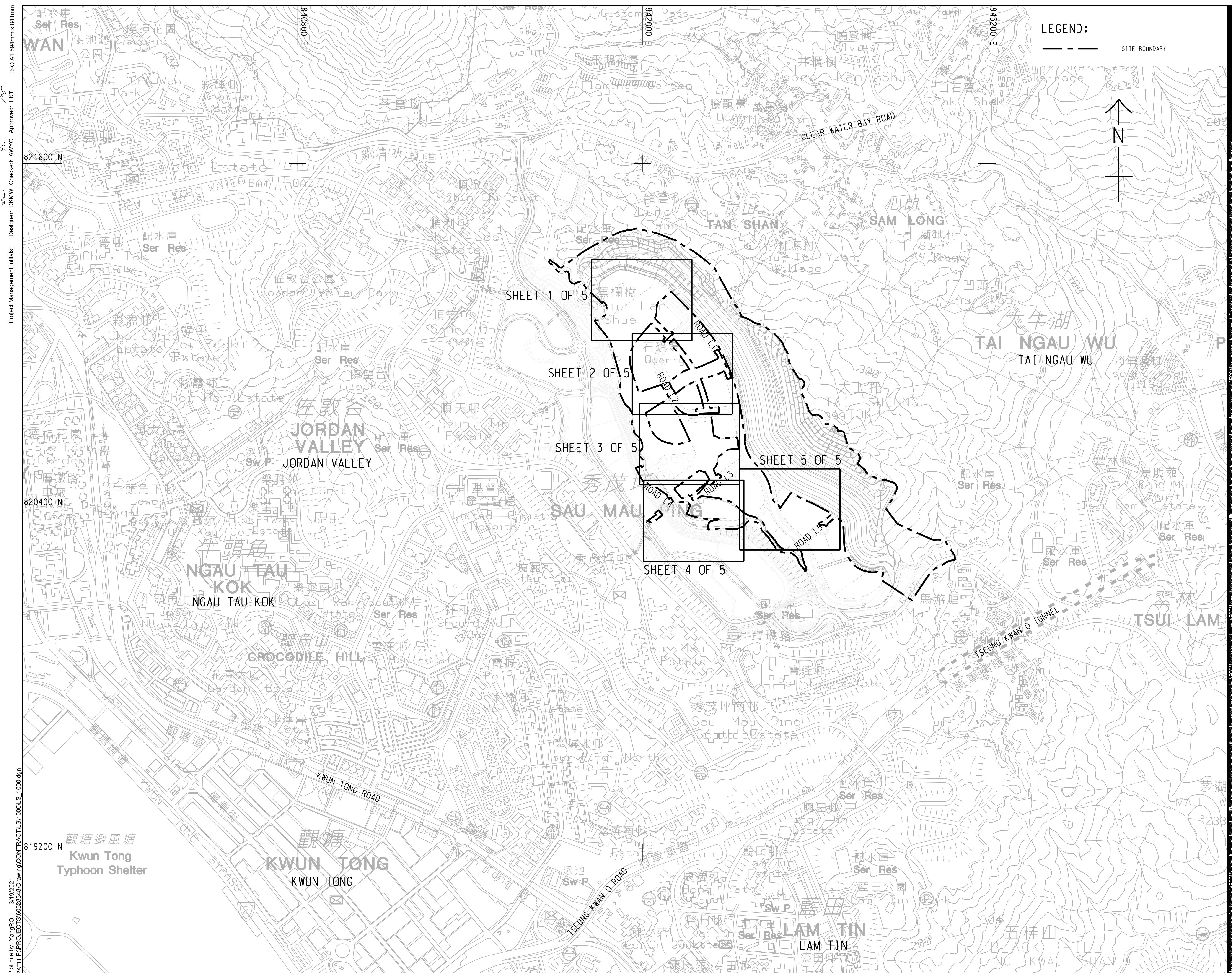
Appendix A

Layout plan of the Project

Contract Packages



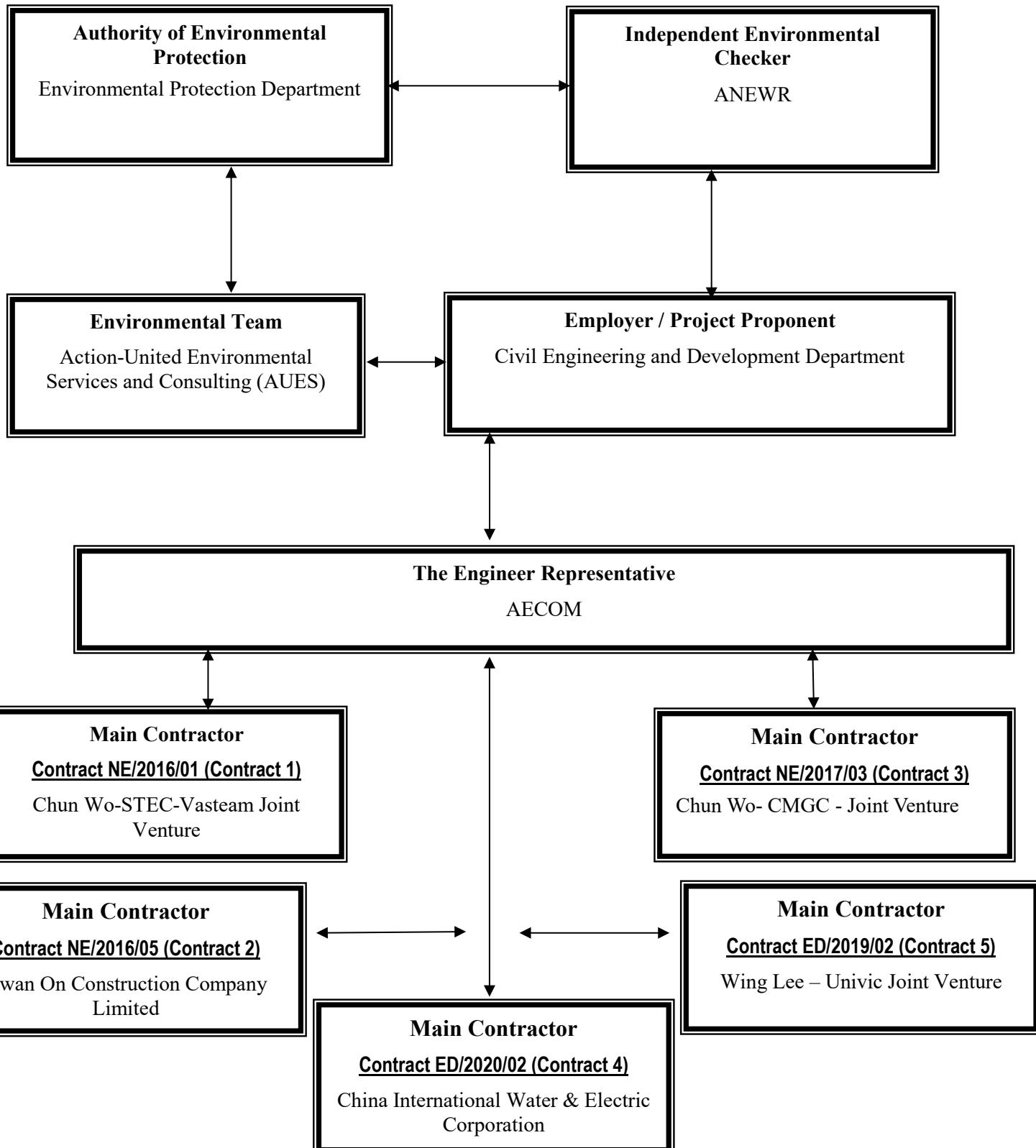
Layout plan of Contract 4 (ED/2020/02)



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECON's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

Appendix B

Project Organization Structure

Project Organization Structure

Contact Details of Key Personnel for Contract 4 –ED/2020/02

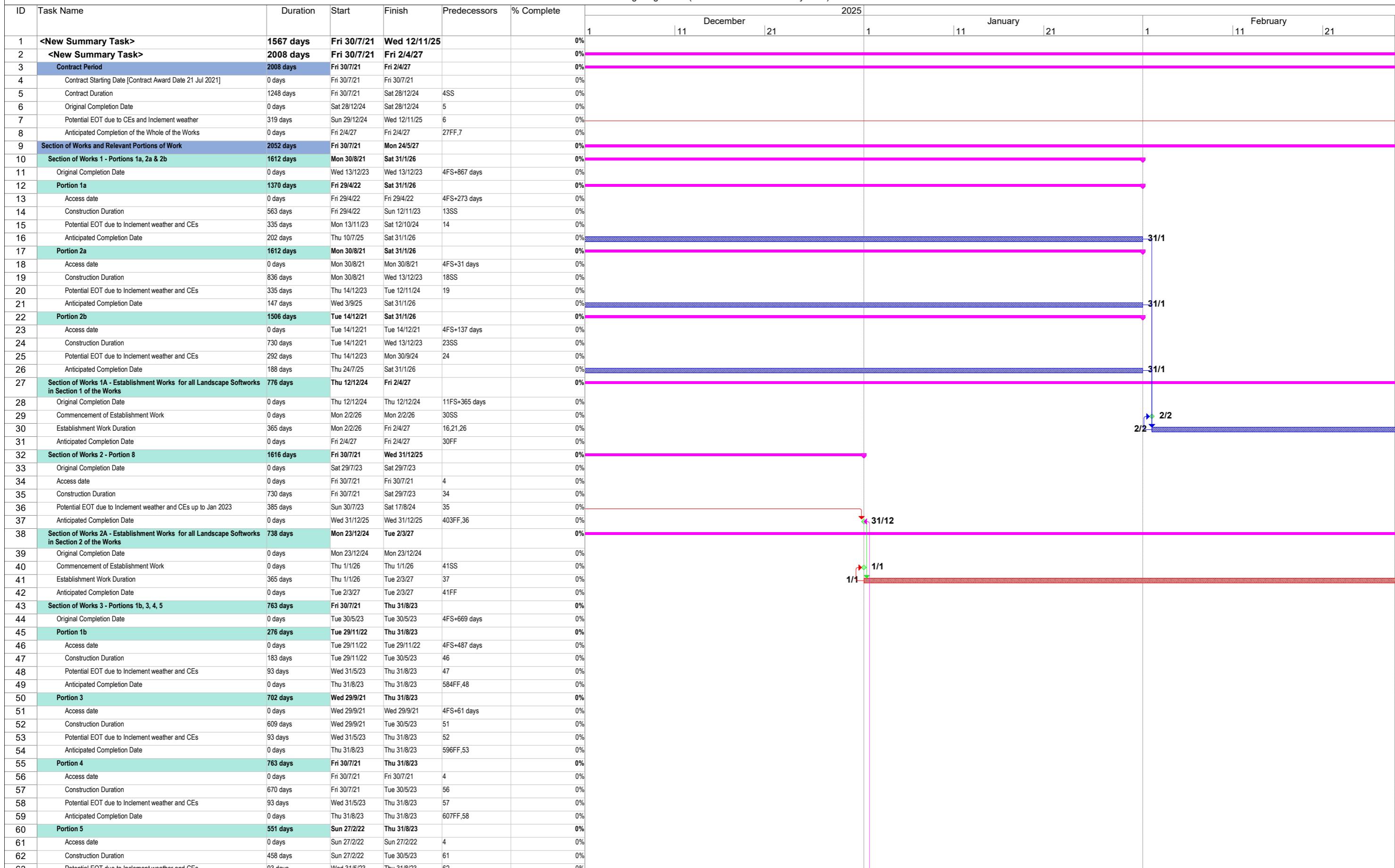
| Organization | Project Role | Name of Key Staff | Tel No. | Fax No. |
|--------------|-----------------------------------|---------------------------|-----------|-----------|
| CEDD | Chief Engineer | Mr. Lee Ming Keung, Marco | 3842 7086 | 2739 0076 |
| AECOM | Senior Resident Engineer | Eddie Wong | 5192 0965 | 2473 3221 |
| AECOM | Resident Engineer | Samson Lam | 5692 6545 | 2473 3221 |
| ANEWR | Independent Environmental Checker | James Choi | 2618 2836 | 3007 8648 |
| CIWEC | Project Director | Kevin, Chan Ka Shing | 6159 9750 | 2508 0987 |
| CIWEC | Site Agent | John Dan | 9463 3062 | 2508 0987 |
| CIWEC | Environmental Officer | Man Chun Ning | 6299 8850 | 2508 0987 |
| CIWEC | Environmental Supervisor | Chan Ben Sun, Benson | 6695 5417 | 2508 0987 |
| AUES | Environmental Team Leader | T. W. Tam | 2959 6059 | 2959 6079 |
| AUES | Environmental Consultant | Nicola Hon | 2959 6059 | 2959 6079 |
| AUES | Environmental Consultant | Ben Tam | 2959 6059 | 2959 6079 |

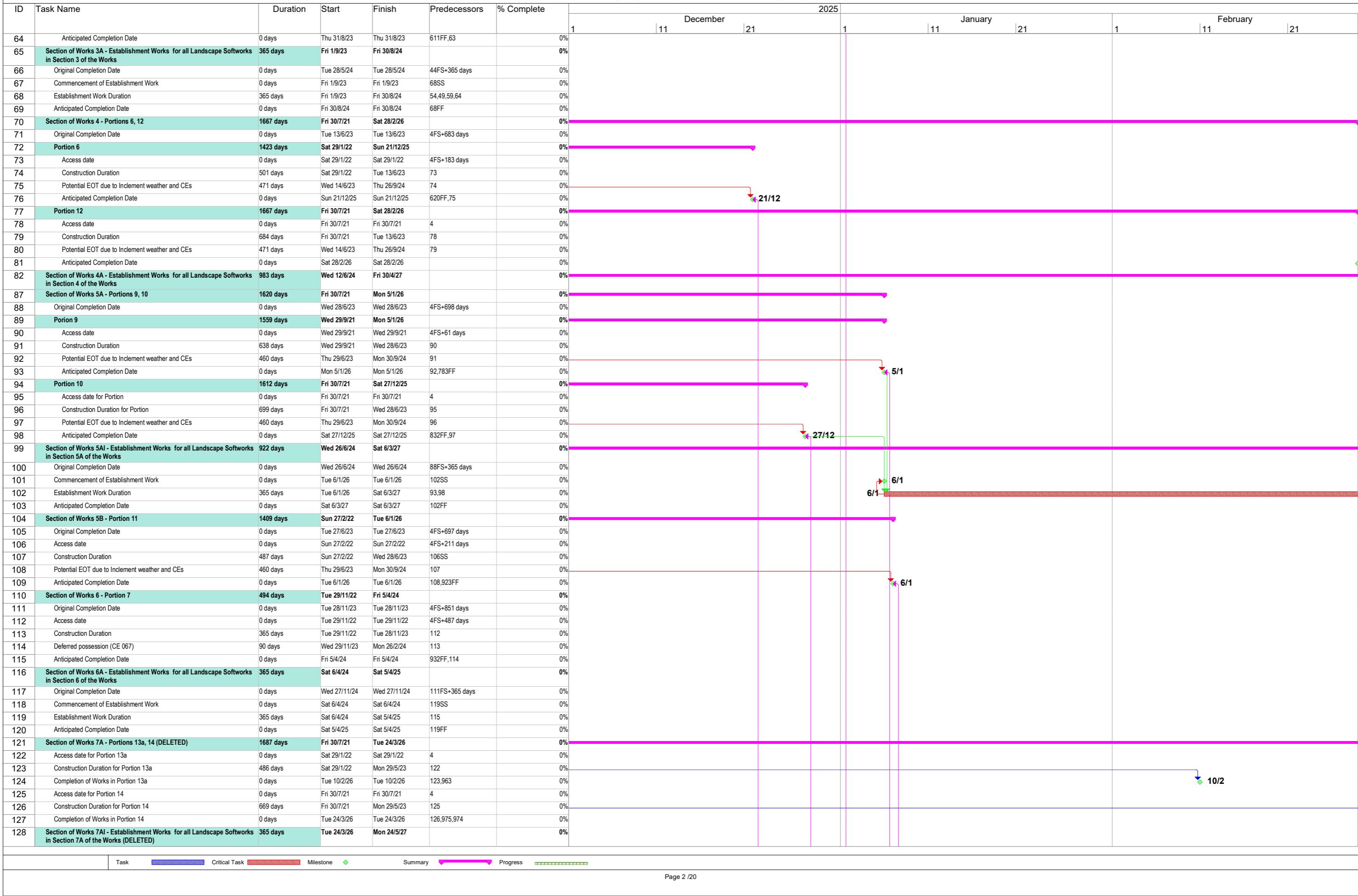
Legend:*CEDD (Employer) – Civil Engineering and Development Department**AECOM (Engineer) – AECOM Asia Co. Ltd.**CIWEC (Main Contractor) – China International Water & Electric Corporation**ANEWR (IEC) – ANewR Consulting Limited**AUES (ET) – Action-United Environmental Services & Consulting*

Appendix C

Construction Programme (a) Contract 4 (ED/2020/02)

Contract 4 (ED/2020/02)


 Task  Critical Task  Milestone  Summary  Progress 



| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | |
|-----|--|-------------|--------------|--------------|----------------|------------|----------|---------|----------|----------|---------|----------|
| | | | | | | | December | January | February | December | January | February |
| 129 | Commencement of Establishment Work for Section 7A | 0 days | Tue 24/3/26 | Tue 24/3/26 | 127 | 0% | 1 | 11 | 21 | 1 | 11 | 21 |
| 130 | Establishment Work Duration for Section 7A | 365 days | Wed 25/3/26 | Mon 24/5/27 | 129 | 0% | | | | | | |
| 131 | Completion of Works in Section 7A | 0 days | Mon 24/5/27 | Mon 24/5/27 | 130,980 | 0% | | | | | | |
| 132 | Section of Works 7B - Portions 13b, 15 | 1461 days | Sat 26/2/22 | Fri 6/3/26 | | 0% | | | | | | |
| 133 | Original Completion Date | 0 days | Thu 28/12/23 | Thu 28/12/23 | 4FS+882 days | 0% | | | | | | |
| 134 | Portion 13b | 1461 days | Sat 26/2/22 | Fri 6/3/26 | | 0% | | | | | | |
| 135 | Access date | 0 days | Sat 26/2/22 | Sat 26/2/22 | 4FS+211 days | 0% | | | | | | |
| 136 | Construction Duration | 671 days | Sun 27/2/22 | Fri 29/12/23 | | 0% | | | | | | |
| 137 | Potential EOT due to Inclement weather and CEs up to Jan 2023 | 300 days | Sat 30/12/23 | Thu 24/10/24 | 136 | 0% | | | | | | |
| 138 | Anticipated Completion Date | 0 days | Fri 6/3/26 | Fri 6/3/26 | | 0% | | | | | | |
| 139 | Portion 15 | 1460 days | Sun 27/2/22 | Fri 6/3/26 | | 0% | | | | | | |
| 140 | Access date | 0 days | Sun 27/2/22 | Sun 27/2/22 | 4 | 0% | | | | | | |
| 141 | Construction Duration | 671 days | Sun 27/2/22 | Fri 29/12/23 | 140 | 0% | | | | | | |
| 142 | Potential EOT due to Inclement weather and CEs | 300 days | Sat 30/12/23 | Thu 24/10/24 | 141 | 0% | | | | | | |
| 143 | Anticipated Completion Date | 0 days | Fri 6/3/26 | Fri 6/3/26 | | 0% | | | | | | |
| 144 | Section of Works 7B - Establishment Works for all Landscape Softworks in Section 7B of the Works | 790 days | Fri 27/12/24 | Thu 6/5/27 | | 0% | | | | | | |
| 145 | Original Completion Date | 0 days | Fri 27/12/24 | Fri 27/12/24 | 133FS+365 days | 0% | | | | | | |
| 146 | Commencement of Establishment Work | 0 days | Sat 7/3/26 | Sat 7/3/26 | 147SS | 0% | | | | | | |
| 147 | Establishment Work Duration | 365 days | Sat 7/3/26 | Thu 6/5/27 | 138,143 | 0% | | | | | | |
| 148 | Anticipated Completion Date | 0 days | Thu 6/5/27 | Thu 6/5/27 | 147FF | 0% | | | | | | |
| 149 | Section of Works 8 - Portion 16 | 564 days | Thu 16/6/22 | Sun 31/12/23 | | 0% | | | | | | |
| 150 | Original Completion Date | 0 days | Wed 28/6/23 | Wed 28/6/23 | 4FS+698 days | 0% | | | | | | |
| 151 | Access date | 0 days | Thu 16/6/22 | Thu 16/6/22 | 4FS+321 days | 0% | | | | | | |
| 152 | Construction Duration | 378 days | Thu 16/6/22 | Wed 28/6/23 | 151 | 0% | | | | | | |
| 153 | Potential EOT due to Inclement weather and CEs | 186 days | Thu 29/6/23 | Sun 31/12/23 | 152 | 0% | | | | | | |
| 154 | Anticipated Completion Date | 0 days | Sun 31/12/23 | Sun 31/12/23 | 153,1175FF | 0% | | | | | | |
| 155 | Section of Works 8A - Establishment Works for all Landscape Softworks in Section 8 of the Works | 365 days | Mon 1/1/24 | Mon 30/12/24 | | 0% | | | | | | |
| 156 | Original Completion Date | 0 days | Thu 27/6/24 | Thu 27/6/24 | 150FS+365 days | 0% | | | | | | |
| 157 | Commencement of Establishment Work | 0 days | Mon 1/1/24 | Mon 1/1/24 | 158SS | 0% | | | | | | |
| 158 | Establishment Work Duration | 365 days | Mon 1/1/24 | Mon 30/12/24 | 154 | 0% | | | | | | |
| 159 | Anticipated Completion Date | 0 days | Mon 30/12/24 | Mon 30/12/24 | 158FF | 0% | | | | | | |
| 160 | Section of Works 9 - Portion 17 | 1279.1 days | Sun 27/2/22 | Fri 29/8/25 | | 0% | | | | | | |
| 161 | Original Completion Date | 0 days | Fri 29/12/23 | Fri 29/12/23 | 4FS+882 days | 0% | | | | | | |
| 162 | Access date | 0 days | Sun 27/2/22 | Sun 27/2/22 | 4FS+212 days | 0% | | | | | | |
| 163 | Construction Duration | 671 days | Sun 27/2/22 | Fri 29/12/23 | 162 | 0% | | | | | | |
| 164 | Potential EOT due to Inclement weather and CEs | 306 days | Sat 30/12/23 | Wed 30/10/24 | 163 | 0% | | | | | | |
| 165 | Anticipated Completion Date | 0 days | Fri 29/8/25 | Fri 29/8/25 | 164,1191FF | 0% | | | | | | |
| 166 | Section of Works 9A - Establishment Works for all Landscape Softworks in Section 9 of the Works | 608.1 days | Sat 28/12/24 | Thu 8/10/26 | | 0% | | | | | | |
| 167 | Original Completion Date | 0 days | Sat 28/12/24 | Sat 28/12/24 | 161FS+365 days | 0% | | | | | | |
| 168 | Commencement of Establishment Work | 0 days | Fri 29/8/25 | Fri 29/8/25 | 165SS | 0% | | | | | | |
| 169 | Establishment Work Duration | 365 days | Fri 29/8/25 | Thu 8/10/26 | 165 | 0% | | | | | | |
| 170 | Anticipated Completion Date | 0 days | Fri 29/8/25 | Fri 29/8/25 | 165FF | 0% | | | | | | |
| 171 | Section of Works 10 - All Tree Protection and Preservation Works | 1202 days | Fri 30/7/21 | Tue 12/11/24 | | 0% | | | | | | |
| 172 | Original Completion Date | 0 days | Thu 28/12/23 | Thu 28/12/23 | 133FF | 0% | | | | | | |
| 173 | Commencement of All Tree Protection and Preservation Work | 0 days | Fri 30/7/21 | Fri 30/7/21 | 4 | 0% | | | | | | |
| 174 | All Tree Protection and Preservation Work | 883 days | Fri 30/7/21 | Fri 29/12/23 | 173 | 0% | | | | | | |
| 175 | Potential EOT due to Inclement weather and CE | 319 days | Sat 30/12/23 | Tue 12/11/24 | 174 | 0% | | | | | | |
| 176 | Completion of All Tree Protection and Preservation Work | 0 days | Tue 12/11/24 | Tue 12/11/24 | 175,1268FF | 0% | | | | | | |
| 177 | Preliminaries | 1567 days | Fri 30/7/21 | Wed 12/11/25 | | 76% | | | | | | |
| 178 | Establishment of Commercial/Organization | 370 days | Fri 30/7/21 | Wed 3/8/22 | | 85% | | | | | | |
| 179 | Inform Contractor of the name and delegated authorities of the PMD (ER) | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 180 | Confirmation and arrangement of the method of payment | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 181 | Issue forms to CIC& PCFB | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | |
| 182 | Submission of MPF form to MPFSA | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 183 | Notification to Labour Department/Marine Department of the commencement date and other details of the contract | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 184 | Submission of Summary Details of Contract to the Departmental Safety and Environmental | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 100% | | | | | | |
| 185 | Nominate a Labour Officer | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 186 | Set up Site Liaison Group (SLG) | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 187 | Professional video production company and a competent video director | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 188 | Surveyor, Key People | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |
| 189 | Traffic Consultant, Traffic Engineer | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | | |
|-----|--|-----------------|--------------------|--------------------|--------------|-------------|----------|---------|----------|------|----|----|---|
| | | | | | | | December | January | February | 1 | 11 | 21 | 1 |
| 190 | Particulars of Independent service provider for Digital Works Supervision System | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 191 | Contractor's Management Team | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 192 | BIM team | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 193 | Competent member of the sites supervisory staff to oversee and supervise tree works related to arboricultural operations and preservation of trees within | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 100% | | | | | | | |
| 194 | Content of Contract Webpage (Monthly update afterwards) | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 0% | | | | | | | |
| 195 | Particulars of the assigned person (competent member with arboriculture knowledge of the site supervisory for tree preservation) | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 100% | | | | | | | |
| 196 | Details of Geotechnical monitoring team | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 100% | | | | | | | |
| 197 | Design of the CRE Site Office certified by an accepted ICE | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 198 | Design Architect | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 199 | Specially required staff | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 200 | Public Relation Officer | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 201 | Site Safety Committee (SSC) Meeting (monthly afterwards) | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 202 | Meeting of the SSMC (monthly afterwards) | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 203 | Professional Indemnity Insurance in respect of Contractor's Design | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 204 | Proposed gasket material for waterworks | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 205 | 7 days advance notice of the date on which workers begin to wear Site uniform; Provide uniforms within 5 days after the design is accepted by PM | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 206 | 2 Engineering Graduates & 3 Technician apprentices | 90 days | Fri 30/7/21 | Wed 27/10/21 | 4 | 80% | | | | | | | |
| 207 | Commissioning of DWSS | 90 days | Fri 30/7/21 | Wed 27/10/21 | 4 | 100% | | | | | | | |
| 208 | Agree on the content and presentation of the dashboard of DWSS | 90 days | Fri 30/7/21 | Wed 27/10/21 | 4 | 100% | | | | | | | |
| 209 | Monthly collaboration and information exchange of BIM | 90 days | Fri 30/7/21 | Wed 27/10/21 | 4 | 100% | | | | | | | |
| 210 | Combined Services Drawing (CSD) and CBWD generated from BIM model | 90 days | Fri 30/7/21 | Wed 27/10/21 | 4 | 100% | | | | | | | |
| 211 | Video script for Project Video Film | 180 days | Fri 30/7/21 | Tue 25/1/22 | 4 | 100% | | | | | | | |
| 212 | Employment of Construction Industry Council's Graduates (min. 4 graduates) | 180 days | Fri 30/7/21 | Tue 25/1/22 | 4 | 0% | | | | | | | |
| 213 | Nomination of Treatment process specialist, Design Engineer, and Independent Checking Engineer (ICE) | 34 days | Fri 1/7/22 | Wed 3/8/22 | | 100% | | | | | | | |
| 214 | Plan & Proposals | 60 days | Fri 30/7/21 | Mon 27/9/21 | | 100% | | | | | | | |
| 215 | Preparation and submission of Noise Mitigation Plan (3 hard copies, 2 electronic copies) | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 216 | Preparation and submission of Waste Management Plan (WMP) | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 217 | Preparation and submission of Draft Construction Health and Safety Plan (3 copies) | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 218 | Preparation and submission of Quality Policy statement and quality plan | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 219 | Preparation and submission of Draft Environmental Management Plan (EMP) 3 copies | 4 days | Fri 30/7/21 | Mon 2/8/21 | 4 | 100% | | | | | | | |
| 220 | Tender requirements for suppliers of Plant and Materials, Equipment and Insurance Proposal | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 221 | Preparation of Proposal for arrangement for placement of storage compartments/ drinking water facilities/ toilet/ hand-wash facilities/ showering/ rubbishbin/ working shelter on Site | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 222 | Preparation Proposal for security system | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 223 | Preparation and submission of DWSS proposal | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 100% | | | | | | | |
| 224 | Preparation and submission of Subcontractor Management Plan (SMP) | 21 days | Fri 30/7/21 | Thu 19/8/21 | 4 | 100% | | | | | | | |
| 225 | Preparation and submission of Construction Health and Safety Plan (6 copies) | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 226 | Weather protection scheme | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 227 | Proposal of COBie information requirements | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 228 | Preparation and submission of Final Environmental Management Plan (EMP) 3 copies | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 229 | Preparation of Proposed Plans for submission of each Release of construction and Project Video Films | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 230 | Preparation and submission of Site Traffic Safety Management Plan (ST SMP), (monthly update) | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 231 | Preparation and submission of Site Management Plan for TTS | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 232 | Preparation and submission of BIM Execution Plan accordance with the PSA 1.14D | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 233 | Public Relation (PR) Company, PR plan | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 234 | Preparation and submission of Temporary drainage management plan | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 235 | Procurements of Major Materials | 411 days | Thu 16/3/23 | Mon 29/4/24 | | 37% | | | | | | | |
| 236 | Procurement & material submission of bearing for elevated walkway | 45 days | Thu 16/3/23 | Sat 29/4/23 | | 100% | | | | | | | |
| 237 | Design, manufacturing and FAT of bearing for elevated walkway | 115 days | Sun 30/4/23 | Tue 22/8/23 | 236 | 100% | | | | | | | |
| 238 | Deliveries and site inspection of bearing for elevated walkway etc. | 15 days | Wed 23/8/23 | Wed 6/9/23 | 237 | 100% | | | | | | | |
| 239 | Procurement & material submission of movement joint for elevated walkway | 45 days | Thu 16/3/23 | Sat 29/4/23 | | 100% | | | | | | | |
| 240 | Design, manufacturing and FAT of movement joint for elevated walkway | 115 days | Sun 30/4/23 | Tue 22/8/23 | 239 | 100% | | | | | | | |
| 241 | Deliveries and site inspection of movement joint for elevated walkway etc. | 15 days | Wed 23/8/23 | Wed 6/9/23 | 240 | 100% | | | | | | | |
| 242 | Procurement of Raise Planter Type A&B | 60 days | Mon 1/1/24 | Thu 29/2/24 | | 0% | | | | | | | |
| 243 | Manufacturing, FAT & delivery of Raise Planter Type A&B | 60 days | Fri 1/3/24 | Mon 29/4/24 | 242 | 0% | | | | | | | |
| 244 | Procurement of Balustrade Wall BW1-2 | 60 days | Mon 1/1/24 | Thu 29/2/24 | | 0% | | | | | | | |
| 245 | Manufacturing, FAT & delivery of Balustrade Wall BW1-2 | 60 days | Fri 1/3/24 | Mon 29/4/24 | 244 | 0% | | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | | |
|-----|---|------------------|--------------------|---------------------|--------------|-------------|----------|---------|----------|------|----|----|--|
| | | | | | | | December | January | February | 1 | 11 | 21 | |
| 246 | Procurement of Children Play Areas & water play area Park Facilities | 60 days | Mon 1/1/24 | Thu 29/2/24 | | 0% | | | | | | | |
| 247 | Design, Manufacturing, FAT & delivery of Children Play Areas & water play area Park Facilities | 60 days | Fri 1/3/24 | Mon 29/4/24 | 246 | 0% | | | | | | | |
| 248 | Procurement of Adult fitness Area Park Facilities | 60 days | Mon 1/1/24 | Thu 29/2/24 | | 0% | | | | | | | |
| 249 | Design Manufacturing, FAT & delivery of Adult fitness Area Park Facilities | 60 days | Fri 1/3/24 | Mon 29/4/24 | 248 | 0% | | | | | | | |
| 250 | Procurement of Elderly fitness Area Park Facilities | 60 days | Mon 1/1/24 | Thu 29/2/24 | | 0% | | | | | | | |
| 251 | Design, Manufacturing, FAT & delivery of Elderly fitness Area Park Facilities | 60 days | Fri 1/3/24 | Mon 29/4/24 | 250 | 0% | | | | | | | |
| 252 | Programme | 1537 days | Fri 30/7/21 | Mon 13/10/25 | | 54% | | | | | | | |
| 253 | Preparation & Submission of First Works Program | 6 days | Fri 30/7/21 | Wed 4/8/21 | 4 | 100% | | | | | | | |
| 254 | Preparation & Submission of Three Months Rolling Program | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 255 | Program Review and Acceptance of First Program | 14 days | Thu 5/8/21 | Wed 18/8/21 | 253 | 100% | | | | | | | |
| 256 | Preparation and Submission of Detailed Works Program | 60 days | Thu 19/8/21 | Sun 17/10/21 | 255,254 | 100% | | | | | | | |
| 257 | Program Review and Acceptance of Works Program | 14 days | Mon 18/10/21 | Sun 31/10/21 | 256 | 100% | | | | | | | |
| 258 | Implementation of Programme Management and Monthly Reporting | 1443 days | Mon 1/11/21 | Mon 13/10/25 | 257 | 51% | | | | | | | |
| 259 | Permit and Licences | 60 days | Fri 30/7/21 | Mon 27/9/21 | | 100% | | | | | | | |
| 260 | Detailed construction sequences with associated traffic diversion schemes and obtain endorsement in principle from the relevant authorities and the | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 261 | Risk Assessment for slope works | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 262 | Welfare facilities for workers in accordance with requirements in PS Clause 1.7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | | |
| 263 | UU detection equipment brand/model | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 264 | Certified calibration certificates | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 265 | Contract Computer Facilities, Electronic Document Management System, Site Record Information System, Digital Works Supervision System and other | 6 days | Fri 30/7/21 | Wed 4/8/21 | 4 | 100% | | | | | | | |
| 266 | Name of the designated bank and all related arrangement details for payment of wages to all the Site Workers | 6 days | Fri 30/7/21 | Wed 4/8/21 | 4 | 100% | | | | | | | |
| 267 | Site Cleanliness and Tidiness | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 268 | 3 sets of coloured record photos in SR size (recording existing building/ street furniture....) | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 269 | Contract Cars | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 270 | Design of uniform for site workers | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 271 | Survey Equipment for Initial survey | 7 days | Fri 30/7/21 | Thu 5/8/21 | 4 | 100% | | | | | | | |
| 272 | Inclinometer access tubes - suppliers, material specification and samples of the tubes and couplings | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 273 | Payment of Wages System for Site Workers | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 274 | Tree survey record | 14 days | Fri 30/7/21 | Thu 12/8/21 | 4 | 100% | | | | | | | |
| 275 | Supply of Survey Equipment for PM use | 30 days | Fri 30/7/21 | Sat 28/8/21 | 4 | 100% | | | | | | | |
| 276 | Complete setting up and begin to operate the Security System | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 277 | Initial Survey | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 278 | Assessment for the risk resulting from working in hot weather | 60 days | Fri 30/7/21 | Mon 27/9/21 | 4 | 100% | | | | | | | |
| 279 | Contractor's Design | 1034 days | Fri 1/7/22 | Tue 29/4/25 | | 81% | | | | | | | |
| 280 | Architectural & Structural | 183 days | Fri 1/7/22 | Fri 30/12/22 | | 100% | | | | | | | |
| 281 | Prepare & Submission | 31 days | Fri 1/7/22 | Sun 31/7/22 | 4 | 100% | | | | | | | |
| 282 | Internal Review & Submission | 15 days | Mon 1/8/22 | Mon 15/8/22 | 281 | 100% | | | | | | | |
| 283 | PM Review & AIP | 16 days | Tue 16/8/22 | Wed 31/8/22 | 282 | 100% | | | | | | | |
| 284 | Re-submission | 30 days | Thu 1/9/22 | Fri 30/9/22 | 283 | 100% | | | | | | | |
| 285 | Design Checker Review & Endorsement | 7 days | Sat 1/10/22 | Fri 7/10/22 | 284 | 100% | | | | | | | |
| 286 | DDA Submission (circulation to Government Authorities) | 8 days | Sat 8/10/22 | Sat 15/10/22 | 285 | 100% | | | | | | | |
| 287 | Time risk allowance for DDA processing | 7 days | Sun 16/10/22 | Sat 22/10/22 | 286 | 100% | | | | | | | |
| 288 | Vetting Process and Approval by Government Authorities and PM | 69 days | Sun 23/10/22 | Fri 30/12/22 | 287 | 100% | | | | | | | |
| 289 | Park lighting, irrigation system, smart system etc. | 341 days | Mon 14/11/22 | Fri 20/10/23 | | 100% | | | | | | | |
| 290 | Covered walkway | 180 days | Fri 1/11/24 | Tue 29/4/25 | | 0% | | | | | | | |
| 291 | Prepare | 30 days | Wed 6/11/24 | Thu 5/12/24 | | 0% | | | | | | | |
| 292 | Internal review, ICE, CSD and submission | 60 days | Fri 6/12/24 | Mon 3/2/25 | 291 | 0% | | | | | | | |
| 293 | AIP | 30 days | Tue 4/2/25 | Wed 5/3/25 | 292 | 0% | | | | | | | |
| 294 | Contractor's Design [Enhancement on Architectural Design & Associated Works] | 1036 days | Fri 14/1/22 | Thu 14/11/24 | | 94% | | | | | | | |
| 295 | Engagement of Design Architectural Firm (CE 005) | 0 days | Fri 14/1/22 | Fri 14/1/22 | | 0% | | | | | | | |
| 296 | Enhancement on Architectural Design & Associated Works at Portions 1a, 2a and 2b (Quarry Lake) (CE 070) | 0 days | Tue 4/4/23 | Tue 4/4/23 | 295 | 0% | | | | | | | |
| 297 | AIP and approvals | 275 days | Fri 1/7/22 | Sat 1/4/23 | | 100% | | | | | | | |
| 298 | Schematic Landscape Master Plan (LMP), Design AIP, GBP approval | 153 days | Fri 1/7/22 | Wed 30/11/22 | 295 | 100% | | | | | | | |
| 299 | Production of AIP Drawings | 92 days | Sat 31/12/22 | Sat 1/4/23 | 298 | 100% | | | | | | | |
| 300 | DSD's AIP approval | 0 days | Sat 1/4/23 | Sat 1/4/23 | 299 | 100% | | | | | | | |
| 301 | Detailed Design Submission Schedule | 473 days | Mon 31/7/23 | Thu 14/11/24 | | 98% | | | | | | | |
| 302 | Statutory submission | 92 days | Wed 30/8/23 | Thu 30/11/23 | 300 | 0% | | | | | | | |
| 303 | FSD submission for GBP | 0 days | Thu 30/11/23 | Thu 30/11/23 | | 0% | | | | | | | |
| 304 | WW0542 document | 0 days | Wed 30/8/23 | Wed 30/8/23 | | 0% | | | | | | | |
| 305 | Civil | 46 days | Wed 30/8/23 | Sun 15/10/23 | 300 | 0% | | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | |
|-----|--|-----------------|--------------------|---------------------|---------------|-------------|------|----|----|------|----|----|
| | | | | | | | 1 | 11 | 21 | 1 | 11 | 21 |
| 306 | Underground rain water drainage | 0 days | Sun 15/10/23 | Sun 15/10/23 | | 0% | | | | | | |
| 307 | Underground watermain | 0 days | Wed 30/8/23 | Wed 30/8/23 | | 0% | | | | | | |
| 308 | Undergroud sewerage | 0 days | Sat 30/9/23 | Sat 30/9/23 | | 0% | | | | | | |
| 309 | Irrigation | 0 days | Wed 30/8/23 | Wed 30/8/23 | | 0% | | | | | | |
| 310 | Landscape and Miscellaneous | 101 days | Mon 21/8/23 | Thu 30/11/23 | 300 | 0% | | | | | | |
| 311 | Landscape | 56 days | Mon 21/8/23 | Sun 15/10/23 | | 0% | | | | | | |
| 312 | Smart weir system | 0 days | Mon 30/10/23 | Mon 30/10/23 | | 0% | | | | | | |
| 313 | Flood warning system | 0 days | Thu 30/11/23 | Thu 30/11/23 | | 0% | | | | | | |
| 314 | Building | 473 days | Mon 31/7/23 | Thu 14/11/24 | | 100% | | | | | | |
| 315 | A1: Lavatories | 473 days | Mon 31/7/23 | Thu 14/11/24 | | 100% | | | | | | |
| 316 | Architecture | 32 days | Mon 31/7/23 | Thu 31/8/23 | | 100% | | | | | | |
| 317 | Structure | 150 days | Sat 7/10/23 | Mon 4/3/24 | | 100% | | | | | | |
| 318 | E & M | 316 days | Thu 4/1/24 | Thu 14/11/24 | | 100% | | | | | | |
| 319 | A2: Management Office Building | 458 days | Tue 15/8/23 | Thu 14/11/24 | | 100% | | | | | | |
| 320 | Architecture | 17 days | Tue 15/8/23 | Thu 31/8/23 | | 100% | | | | | | |
| 321 | Structure | 220 days | Sat 14/10/23 | Mon 20/5/24 | | 100% | | | | | | |
| 322 | E & M | 214 days | Mon 15/4/24 | Thu 14/11/24 | | 100% | | | | | | |
| 323 | B1: Multi-Purpose Building | 458 days | Tue 15/8/23 | Thu 14/11/24 | | 100% | | | | | | |
| 324 | Architecture | 17 days | Tue 15/8/23 | Thu 31/8/23 | | 100% | | | | | | |
| 325 | Structure | 224 days | Sat 28/10/23 | Fri 7/6/24 | | 100% | | | | | | |
| 326 | E & M | 251 days | Sat 9/3/24 | Thu 14/11/24 | | 100% | | | | | | |
| 327 | B2: TX Room/Lavatories | 458 days | Tue 15/8/23 | Thu 14/11/24 | | 100% | | | | | | |
| 328 | Architecture | 29 days | Tue 15/8/23 | Tue 12/9/23 | | 100% | | | | | | |
| 329 | Structure | 199 days | Thu 21/12/23 | Sat 6/7/24 | | 100% | | | | | | |
| 330 | E & M | 263 days | Mon 26/2/24 | Thu 14/11/24 | | 100% | | | | | | |
| 331 | C2: Water Treatment Plant Room | 458 days | Tue 15/8/23 | Thu 14/11/24 | | 100% | | | | | | |
| 332 | Architecture | 17 days | Tue 15/8/23 | Thu 31/8/23 | | 100% | | | | | | |
| 333 | Structure | 271 days | Sat 7/10/23 | Wed 3/7/24 | | 100% | | | | | | |
| 334 | E & M | 196 days | Fri 3/5/24 | Thu 14/11/24 | | 100% | | | | | | |
| 335 | Schedule of Accommodation (SoA) Submission | 141 days | Sun 2/4/23 | Mon 21/8/23 | 300 | 100% | | | | | | |
| 336 | Stage 1 | 56 days | Sun 2/4/23 | Sat 27/5/23 | | 100% | | | | | | |
| 337 | Agree SoA with DSD | 14 days | Sun 2/4/23 | Sat 15/4/23 | | 100% | | | | | | |
| 338 | Workshop | 8 days | Sun 16/4/23 | Sun 23/4/23 | 337 | 100% | | | | | | |
| 339 | GPA submission and approval | 34 days | Mon 24/4/23 | Sat 27/5/23 | 338 | 100% | | | | | | |
| 340 | Stage 2 | 63 days | Mon 19/6/23 | Mon 21/8/23 | 339 | 100% | | | | | | |
| 341 | Submission | 0 days | Mon 19/6/23 | Mon 19/6/23 | | 100% | | | | | | |
| 342 | approval | 0 days | Mon 21/8/23 | Mon 21/8/23 | 341 | 100% | | | | | | |
| 343 | DSD's VCAB submission | 183 days | Fri 7/4/23 | Fri 6/10/23 | | 100% | | | | | | |
| 344 | Stage 1 - AIP | 28 days | Fri 7/4/23 | Thu 4/5/23 | | 100% | | | | | | |
| 345 | Submission and presentation | 8 days | Fri 7/4/23 | Fri 14/4/23 | | 100% | | | | | | |
| 346 | Approval | 20 days | Sat 15/4/23 | Thu 4/5/23 | 345 | 100% | | | | | | |
| 347 | Stage 2 - Detailed design | 67 days | Tue 1/8/23 | Fri 6/10/23 | 346 | 100% | | | | | | |
| 348 | Submission and presentation | 0 days | Tue 1/8/23 | Tue 1/8/23 | | 100% | | | | | | |
| 349 | VCAB meeting | 0 days | Thu 7/9/23 | Thu 7/9/23 | 348 | 100% | | | | | | |
| 350 | Approval | 30 days | Thu 7/9/23 | Fri 6/10/23 | 349 | 100% | | | | | | |
| 351 | Sub-letting (Cost Trimming Scheme) | 211 days | Wed 1/3/23 | Wed 27/9/23 | | 100% | | | | | | |
| 352 | Drawings for cost estimation | 30 days | Wed 1/3/23 | Thu 30/3/23 | 300FS-32 days | 100% | | | | | | |
| 353 | Tender approval | 11 days | Fri 31/3/23 | Mon 10/4/23 | 352 | 100% | | | | | | |
| 354 | Tender addendum | 8 days | Mon 17/4/23 | Mon 24/4/23 | 353 | 100% | | | | | | |
| 355 | Sub-letting Period | 25 days | Tue 4/4/23 | Fri 28/4/23 | 354FS-21 days | 100% | | | | | | |
| 356 | Tender Assessment & approval | 12 days | Sat 29/4/23 | Wed 10/5/23 | 355 | 100% | | | | | | |
| 357 | PMI preparation | 58 days | Thu 11/5/23 | Fri 7/7/23 | 356 | 100% | | | | | | |
| 358 | Recost trimming by DSD | 21 days | Sat 8/7/23 | Fri 28/7/23 | 357 | 100% | | | | | | |
| 359 | Resubmission of detailed design | 30 days | Tue 8/8/23 | Wed 6/9/23 | 358 | 100% | | | | | | |
| 360 | Retendering | 21 days | Thu 7/9/23 | Wed 27/9/23 | 359 | 100% | | | | | | |
| 361 | Material submission | 181 days | Thu 28/9/23 | Tue 26/3/24 | 360 | 18% | | | | | | |
| 362 | Method Statements & Temporary Works | 792 days | Fri 30/7/21 | Fri 29/9/23 | | 100% | | | | | | |
| 363 | Preparation & submission of generic method statement for site formation work | 60 days | Tue 1/11/22 | Fri 30/12/22 | | 100% | | | | | | |
| 364 | Preparation & submission of generic method statement for earth slope works | 60 days | Tue 1/11/22 | Fri 30/12/22 | | 100% | | | | | | |
| 365 | Preparation & submission of generic method statement for retaining wall construction | 60 days | Wed 1/6/22 | Sat 30/7/22 | | 100% | | | | | | |
| 366 | Preparation & submission of generic method statement for G.I works | 60 days | Fri 30/7/21 | Mon 27/9/21 | | 100% | | | | | | |
| 367 | Preparation & Submission of generic method statement for drainage works | 60 days | Fri 30/7/21 | Mon 27/9/21 | | 100% | | | | | | |
| 368 | Preparation and submission of generic method statement of road works | 60 days | Tue 1/11/22 | Fri 30/12/22 | | 100% | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | |
|-----|--|-------------------|--------------------|---------------------|-------------------------|------------|----------|---------|----------|------|----|----|
| | | | | | | | December | January | February | 1 | 11 | 21 |
| 369 | Preparation & submission of generic method statement of elevated walkway construction | 60 days | Thu 1/6/23 | Sun 30/7/23 | | 100% | | | | | | |
| 370 | Temporary Work for cut/fill slope works | 60 days | Tue 1/11/22 | Fri 30/12/22 | | 100% | | | | | | |
| 371 | Temporary Work for retaining wall construction | 60 days | Wed 1/6/22 | Sat 30/7/22 | | 100% | | | | | | |
| 372 | Temporary Work for elevated walkway construction | 60 days | Tue 1/8/23 | Fri 29/9/23 | | 100% | | | | | | |
| 373 | Temporary Work for road and drainage works | 60 days | Fri 30/7/21 | Mon 27/9/21 | | 100% | | | | | | |
| 374 | BIM Deliverable | 1567 days | Fri 30/7/21 | Wed 12/11/25 | | 56% | | | | | | |
| 375 | Submission of COBie Information Requirements for Asset Management | 30 days | Fri 30/7/21 | Sat 28/8/21 | | 100% | | | | | | |
| 376 | Submission of BIM Execution Plan in accordance with the PS Appendix 1.14D | 60 days | Fri 30/7/21 | Mon 27/9/21 | | 100% | | | | | | |
| 377 | Submission of Combined Services Drawings | 90 days | Fri 30/7/21 | Wed 27/10/21 | | 100% | | | | | | |
| 378 | Submission of proposal for BIM training plan | 90 days | Fri 30/7/21 | Wed 27/10/21 | | 100% | | | | | | |
| 379 | Nomination of staff or subcontractor to attend BIM skill training courses under the pre approved list of the CITF managed by the CIC | 120 days | Fri 30/7/21 | Fri 26/11/21 | | 100% | | | | | | |
| 380 | Collaboration and Model Sharing | 60 days | Thu 28/10/21 | Sun 26/12/21 | 376FS+30 days | 100% | | | | | | |
| 381 | Monthly Coordination meeting& Submission of monthly BIM progress reports & Submission of 4D Simulation | 1417 days | Mon 27/12/21 | Wed 12/11/25 | 380 | 48% | | | | | | |
| 382 | Submission of COBie data deliverables | 30 days | Sun 14/9/25 | Mon 13/10/25 | 381FS-60 days | 0% | | | | | | |
| 383 | Submission of a Fully Coordinated BIM Model with field verified in LOD 500 | 30 days | Thu 2/10/25 | Fri 31/10/25 | 381FS-42 days | 0% | | | | | | |
| 384 | Submission of O&M Manuals, Product Catalogues and Operating Data | 30 days | Thu 2/10/25 | Fri 31/10/25 | 381FS-42 days | 0% | | | | | | |
| 385 | Submission of As-built drawings | 30 days | Thu 2/10/25 | Fri 31/10/25 | 381FS-42 days | 0% | | | | | | |
| 386 | Submission of Asset Data | 30 days | Thu 2/10/25 | Fri 31/10/25 | 381FS-42 days | 0% | | | | | | |
| 387 | Work Area | 1572 days | Fri 30/7/21 | Mon 17/11/25 | | 52% | | | | | | |
| 388 | CRE Site Office Design & ICE Endorsement | 30 days | Fri 30/7/21 | Sat 28/8/21 | | 100% | | | | | | |
| 389 | CRE Site office Design Review and Acceptance | 30 days | Sun 29/8/21 | Mon 27/9/21 | 388 | 100% | | | | | | |
| 390 | CRE Site office Construction Works | 90 days | Tue 28/9/21 | Sun 26/12/21 | 389 | 100% | | | | | | |
| 391 | Completion of CRE Site office Construction Works | 0 days | Mon 24/1/22 | Mon 24/1/22 | 390 | 100% | | | | | | |
| 392 | CRE Site office Mobilization & Maintenance | 1394 days | Mon 24/1/22 | Mon 17/11/25 | 390,391 | 47% | | | | | | |
| 393 | Access for Works Area | 0 days | Fri 30/7/21 | Fri 30/7/21 | | 100% | | | | | | |
| 394 | Maintenance Duration for Works Area | 1566 days | Sat 31/7/21 | Wed 12/11/25 | 393FS+1 day | 53% | | | | | | |
| 395 | Vacate / Handover Works Area | 0 days | Wed 12/11/25 | Wed 12/11/25 | | 0% | | | | | | |
| 396 | Setting up Contractor's Project office | 90 days | Tue 28/9/21 | Sun 26/12/21 | 4 | 100% | | | | | | |
| 397 | Contractor Site office Maintenance | 1389 days | Mon 24/1/22 | Wed 12/11/25 | 396 | 47% | | | | | | |
| 398 | Construction Works | 2037 days? | Thu 29/7/21 | Wed 5/5/27 | | 84% | | | | | | |
| 399 | Section of Works 1A - Establishment Works for all Landscape Softworks in Section 1 of the Works | 365 days | Thu 29/7/21 | Thu 28/7/22 | | 0% | | | | | | |
| 400 | Commencement of Establishment Work for Section 1 | 0 days | Fri 30/7/21 | Fri 30/7/21 | | 0% | | | | | | |
| 401 | Establishment Work Duration for Section 1 | 365 days | Thu 29/7/21 | Thu 28/7/22 | 400SS-1 day | 0% | | | | | | |
| 402 | Completion of Works in Section 1 | 0 days | Thu 28/7/22 | Thu 28/7/22 | 401 | 0% | | | | | | |
| 403 | Section of Works 2 - Portion 8 | 1616 days? | Fri 30/7/21 | Wed 31/12/25 | | 95% | | | | | | |
| 404 | Portion 8 | 1616 days? | Fri 30/7/21 | Wed 31/12/25 | | 95% | | | | | | |
| 405 | Provision of site access [on starting date as per Contract] | 7 days | Fri 30/7/21 | Thu 5/8/21 | 34SS | 100% | | | | | | |
| 406 | Mobilization & Site Clearance | 14 days | Fri 6/8/21 | Thu 19/8/21 | 405 | 100% | | | | | | |
| 407 | Preparation & submission of MS, Temp works, associated plans & docs | 52 days | Fri 20/8/21 | Sun 10/10/21 | 406 | 100% | | | | | | |
| 408 | Engineer's AIP of MS, Temp works, plans & associated docs | 22 days | Mon 11/10/21 | Mon 1/11/21 | 407 | 100% | | | | | | |
| 409 | Drainage pipe and manhole | 350 days | Tue 2/11/21 | Mon 17/10/22 | | 100% | | | | | | |
| 410 | Excavation | 350 days | Tue 2/11/21 | Mon 17/10/22 | 408 | 100% | | | | | | |
| 411 | Pipe laying and manhole construction including backfilling | 295 days | Tue 7/12/21 | Tue 27/9/22 | 410SS+35 days | 100% | | | | | | |
| 412 | Excavation for planter | 20 days | Wed 28/9/22 | Mon 17/10/22 | 411 | 100% | | | | | | |
| 413 | Awaiting for revision of design by PM | 219 days | Tue 18/10/22 | Wed 24/5/23 | 412 | 100% | | | | | | |
| 414 | Time Risk Allowance | 14 days | Tue 18/10/22 | Mon 31/10/22 | 412 | 100% | | | | | | |
| 415 | Application for electricity power supply | 421 days | Mon 14/11/22 | Mon 8/1/24 | | 80% | | | | | | |
| 416 | Design Change of Master Layout | 293 days? | Sun 30/7/23 | Fri 17/5/24 | | 100% | | | | | | |
| 417 | Lighting design | 610 days | Mon 14/11/22 | Tue 16/7/24 | 415SS,416FF+60 days,6 | 100% | | | | | | |
| 418 | Approval of lighting design by LCSD | 30 days | Wed 17/7/24 | Thu 15/8/24 | 417 | 100% | | | | | | |
| 419 | Design and fabrication for lamp post holding down bolt | 150 days | Thu 1/2/24 | Sat 29/6/24 | | 100% | | | | | | |
| 420 | Cable wiring & accessories | 21 days | Sun 26/10/25 | Sat 15/11/25 | 453,483,443,533,539,534 | 0% | | | | | | |
| 421 | Testing and commissioning of lighting | 5 days | Sun 16/11/25 | Thu 20/11/25 | 420,454,455,465 | 0% | | | | | | |
| 422 | Irrigation system | 72 days | Mon 18/12/23 | Tue 27/2/24 | | 78% | | | | | | |
| 423 | Approval of WWO542 | 40 days | Mon 18/12/23 | Fri 26/1/24 | | 100% | | | | | | |
| 424 | Approval of Form WWO 046 | 32 days | Sat 27/1/24 | Tue 27/2/24 | 423 | 50% | | | | | | |
| 425 | Wing A | 804 days? | Mon 2/10/23 | Sat 13/12/25 | | 98% | | | | | | |
| 426 | Awaiting hanover from R2-3 | 348 days | Mon 2/10/23 | Fri 13/9/24 | | 100% | | | | | | |
| 427 | U channel and catchpit | 242 days | Fri 1/11/24 | Mon 30/6/25 | | 100% | | | | | | |
| 428 | Play area formation | 75 days | Wed 6/11/24 | Sun 19/1/25 | | 100% | | | | | | |
| 429 | Play area slab | 21 days | Mon 7/7/25 | Sun 27/7/25 | 435 | 100% | | | | | | |
| 430 | Installation, Inspection/certification of play area equipment | 14 days | Sun 21/9/25 | Sat 4/10/25 | 442 | 100% | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | |
|-----|--|------------|--------------|--------------|--------------|------------|----------|---------|----------|------|----|----|
| | | | | | | | December | January | February | 1 | 11 | 21 |
| 431 | Planters RP6 | 33 days | Mon 17/2/25 | Fri 21/3/25 | | 100% | 1 | | | 1 | | |
| 432 | Planters RP5 | 26 days | Mon 10/3/25 | Fri 4/4/25 | | 100% | | | | 1 | | |
| 433 | Planters RP3 | 21 days | Sat 26/4/25 | Fri 16/5/25 | | 100% | | | | 1 | | |
| 434 | Planters RP2 | 21 days | Sat 3/5/25 | Fri 23/5/25 | | 100% | | | | 1 | | |
| 435 | Planters RP1 | 21 days | Mon 16/6/25 | Sun 6/7/25 | | 100% | | | | 1 | | |
| 436 | Planters RP4 | 34 days | Mon 19/5/25 | Sat 21/6/25 | | 100% | | | | 1 | | |
| 437 | Soil replacement | 90 days | Mon 16/6/25 | Sat 13/9/25 | 434 | 100% | | | | 1 | | |
| 438 | Irrigation system | 79 days | Fri 25/7/25 | Sat 11/10/25 | | 100% | | | | 1 | | |
| 439 | Edge and pavement | 28 days | Sun 14/9/25 | Sat 11/10/25 | | 100% | | | | 1 | | |
| 440 | Finishing to planter wall, seat wall and planter kerb | 14 days | Sun 28/9/25 | Sat 18/10/25 | 439 | 100% | | | | 1 | | |
| 441 | Soft landscaping works | 28 days | Thu 18/9/25 | Wed 15/10/25 | | 100% | | | | 1 | | |
| 442 | Lighting System | 58 days | Fri 25/7/25 | Sat 20/9/25 | | 100% | | | | 1 | | |
| 443 | Cable Duct, pillar box, cable drawpit & lamp post footing | 14 days | Fri 25/7/25 | Thu 7/8/25 | 427 | 100% | | | | 1 | | |
| 444 | Installation of Lamp post | 44 days | Fri 8/8/25 | Sat 20/9/25 | 443 | 100% | | | | 1 | | |
| 445 | Rectification Works | 60 days? | Wed 15/10/25 | Sat 13/12/25 | | 50% | 13/12 | | | 1 | | |
| 446 | Wing C | 882 days | Thu 3/8/23 | Wed 31/12/25 | | 75% | 27/12 | | | 1 | | |
| 447 | Catchpit (Stage 1) | 211 days | Thu 3/8/23 | Thu 29/2/24 | | 100% | | | | 1 | | |
| 448 | Catchpit (Stage 2) | 21 days | Fri 25/7/25 | Thu 14/8/25 | | 100% | | | | 1 | | |
| 449 | (awaiting for R2-6) | 107 days | Mon 10/3/25 | Tue 24/6/25 | | 100% | | | | 1 | | |
| 450 | U Channel (Stage 1) | 37 days | Wed 25/6/25 | Thu 31/7/25 | 449 | 100% | | | | 1 | | |
| 451 | U Channel (Stage 2) | 121 days | Fri 29/8/25 | Sat 27/12/25 | 450 | 22% | 27/12 | | | 1 | | |
| 452 | Lighting System | 116 days | Wed 2/7/25 | Sat 25/10/25 | | 61% | | | | 1 | | |
| 453 | Cable Duct, pillar box, cable drawpit & lamp post footing (Stage 1) | 38 days | Wed 2/7/25 | Fri 8/8/25 | 449 | 100% | | | | 1 | | |
| 454 | Cable Duct, pillar box, cable drawpit & lamp post footing (Stage 2) | 56 days | Sun 3/1/25 | Sat 25/10/25 | 453 | 50% | | | | 1 | | |
| 455 | Installation of Lamp post | 14 days | Mon 22/8/25 | Sun 5/10/25 | | 0% | | | | 1 | | |
| 456 | Planter (RP 9) | 40 days | Mon 16/9/24 | Fri 25/10/24 | | 100% | | | | 1 | | |
| 457 | Planter (RP7) | 19 days | Mon 10/2/25 | Fri 28/2/25 | | 100% | | | | 1 | | |
| 458 | Planter (RP8) | 48 days | Mon 1/9/25 | Sat 18/10/25 | | 3% | | | | 1 | | |
| 459 | Soil replacement (RP8) | 3 days | Sun 19/10/25 | Tue 21/10/25 | 458 | 0% | | | | 1 | | |
| 460 | Child Play Area Slab (CP4 & CP5) | 32 days | Wed 22/10/25 | Sat 22/11/25 | 459 | 59% | | | | 1 | | |
| 461 | Procurement of safety mat for play area | 76 days | Mon 16/9/24 | Sat 30/11/24 | 460 | 100% | | | | 1 | | |
| 462 | Installation, Inspection/certification of play area equipment | 7 days | Sun 23/11/25 | Sat 29/11/25 | 460 | 50% | 9/11 | | | 1 | | |
| 463 | Installation of safety mat for play area | 3 days | Sun 30/11/25 | Tue 2/12/25 | 462 | 50% | 2/12 | | | 1 | | |
| 464 | Seat | 3 days | Sun 23/11/25 | Tue 25/11/25 | 460 | 100% | | | | 1 | | |
| 465 | Planter (RP10) | 15 days | Sat 1/11/25 | Sat 15/11/25 | | 100% | | | | 1 | | |
| 466 | Soil replacement (RP10) | 7 days | Sun 16/11/25 | Sat 22/11/25 | 465 | 100% | | | | 1 | | |
| 467 | Irrigation system | 35 days | Mon 8/9/25 | Sun 12/10/25 | | 50% | | | | 1 | | |
| 468 | Edge and pavement (Stage 1-MOE) | 48 days | Sun 13/7/25 | Fri 29/8/25 | | 100% | | | | 1 | | |
| 469 | Edge and pavement (Stage 2) - Resume after Return of borrowed area from R2-6 | 14 days | Mon 1/12/25 | Sun 14/12/25 | 462 | 50% | 14/12 | | | 1 | | |
| 470 | Soft landscaping works | 25 days | Sun 7/12/25 | Wed 31/12/25 | | 11% | 7/12 | 31/12 | | | 1 | |
| 471 | Finishing to planter wall, seat wall and planter kerb | 34 days | Mon 20/10/25 | Sat 22/11/25 | | 100% | | | | 1 | | |
| 472 | Wing B | 1571 days? | Thu 2/9/21 | Sat 20/12/25 | | 98% | 20/12 | | | 1 | | |
| 473 | Shelter (1 nos) | 1415 days | Thu 2/9/21 | Thu 17/7/25 | | 100% | | | | 1 | | |
| 474 | Submission of design | 60 days | Tue 26/3/24 | Fri 24/4/24 | | 100% | | | | 1 | | |
| 475 | Approval of design | 21 days | Thu 11/7/24 | Wed 31/7/24 | 474 | 100% | | | | 1 | | |
| 476 | Construction of footing | 45 days | Thu 15/8/24 | Sat 28/9/24 | 475 | 100% | | | | 1 | | |
| 477 | Fabrication of superstructure | 252 days | Fri 1/11/24 | Thu 10/7/25 | | 100% | | | | 1 | | |
| 478 | Construction of superstructure | 7 days | Fri 11/7/25 | Thu 17/7/25 | 477 | 100% | | | | 1 | | |
| 479 | Shelter roof | 7 days | Thu 2/9/21 | Wed 8/9/21 | | 100% | | | | 1 | | |
| 480 | U channel and Catchpit (Stage 1) | 211 days | Wed 3/1/24 | Wed 31/7/24 | 447SS,448SS | 100% | | | | 1 | | |
| 481 | U channel and Catchpit (Stage 2) | 163 days | Fri 1/11/24 | Sat 12/4/25 | | 100% | | | | 1 | | |
| 482 | Lighting system (Stage 1) | 386 days | Mon 10/6/24 | Mon 30/6/25 | | 100% | | | | 1 | | |
| 483 | Cable Duct, pillar box, cable pit & lamp post footing | 97 days | Mon 10/6/24 | Sat 14/9/24 | | 100% | | | | 1 | | |
| 484 | Installation of lamp post | 100 days | Wed 19/3/25 | Mon 30/6/25 | 419 | 100% | | | | 1 | | |
| 485 | Hard Landscape (Stage 1) | 412 days | Mon 2/9/24 | Sat 18/10/25 | | 100% | | | | 1 | | |
| 486 | Staircase B2 & B3 | 28 days | Mon 2/9/24 | Sun 29/9/24 | | 100% | | | | 1 | | |
| 487 | Edge | 45 days | Mon 16/9/24 | Wed 30/10/24 | | 100% | | | | 1 | | |
| 488 | Soil replacement | 142 days | Mon 14/10/24 | Sat 8/3/25 | 487 | 100% | | | | 1 | | |
| 489 | Irrigation system | 30 days | Tue 7/1/25 | Wed 5/2/25 | 487 | 100% | | | | 1 | | |
| 490 | Seat (PMI) | 44 days | Fri 1/11/24 | Sat 14/12/24 | | 100% | | | | 1 | | |
| 491 | Staircase B5 & B6 | 41 days | Wed 9/10/24 | Mon 18/11/24 | | 100% | | | | 1 | | |
| 492 | Staircase B4 (PMI) | 18 days | Fri 1/11/24 | Mon 18/11/24 | | 100% | | | | 1 | | |
| 493 | pavement | 104 days | Mon 10/3/25 | Sat 21/6/25 | | 100% | | | | 1 | | |

 Task  Critical Task  Milestone  Summary  Progress 

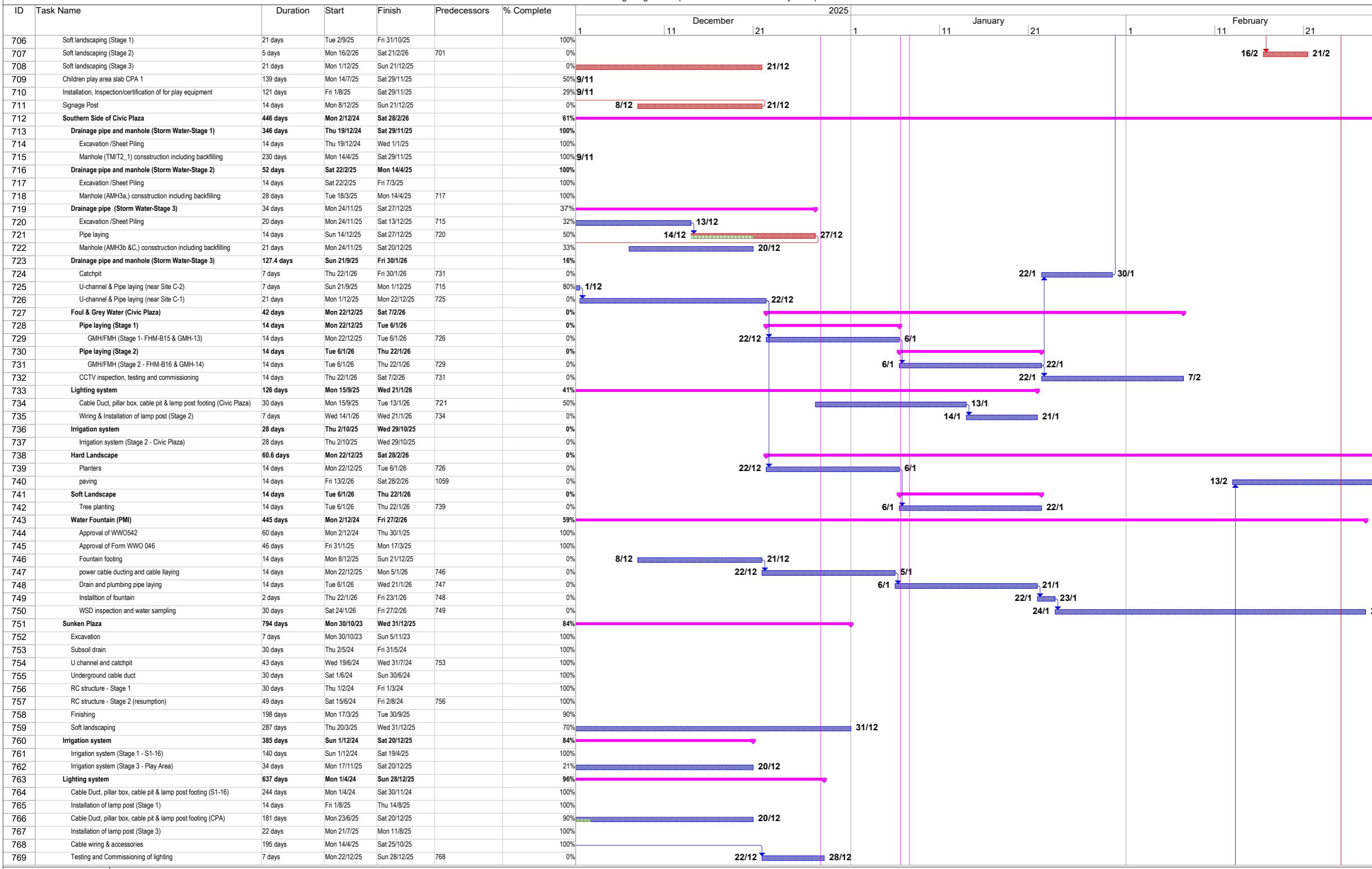
| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | |
|-----|--|------------|--------------|--------------|--------------|------------|----------|---------|----------|----------|---------|----------|
| | | | | | | | December | January | February | December | January | February |
| 494 | Finishing to planter wall, seat wall and planter kerb | 195 days | Mon 7/4/25 | Sat 18/10/25 | | 100% | 1 | 11 | 21 | 1 | 11 | 21 |
| 495 | Open tender for play area equipment | 41 days | Mon 2/9/24 | Thu 31/10/24 | | 100% | | | | | | |
| 496 | Design Submission for play area equipment | 30 days | Mon 14/10/24 | Tue 12/11/24 | 495 | 100% | | | | | | |
| 497 | Procurement of safety mat and equipment for play area | 122 days | Mon 30/12/24 | Wed 30/4/25 | 496 | 100% | | | | | | |
| 498 | Play area slab | 70 days | Sat 15/3/25 | Fri 23/5/25 | 496 | 100% | | | | | | |
| 499 | Installation, Inspection/certification of for play equipment | 77 days | Mon 23/6/25 | Sat 18/10/25 | | 100% | | | | | | |
| 500 | Soft landscaping works | 191 days | Mon 24/3/25 | Tue 30/9/25 | | 100% | | | | | | |
| 501 | Hard Landscape (Stage 2) | 359 days | Fri 1/11/24 | Sat 25/10/25 | | 95% | | | | | | |
| 502 | Irrigation system | 14 days | Fri 1/11/24 | Thu 14/11/24 | | 100% | | | | | | |
| 503 | Staircase B1 | 28 days | Mon 5/1/25 | Sun 2/2/25 | 502 | 100% | | | | | | |
| 504 | Edge | 148 days | Mon 3/2/25 | Mon 30/6/25 | 503 | 100% | | | | | | |
| 505 | Soil replacement | 7 days | Mon 17/2/25 | Fri 28/3/25 | 504 | 100% | | | | | | |
| 506 | pavement | 86 days | Fri 18/7/25 | Sat 11/10/25 | 478 | 80% | | | | | | |
| 507 | Finishing to planter wall, seat wall and planter kerb | 28 days | Sun 28/9/25 | Sat 25/10/25 | | 100% | | | | | | |
| 508 | Soft landscaping works | 14 days | Mon 11/8/25 | Sun 24/8/25 | | 100% | | | | | | |
| 509 | Hard Landscape (Stage 3 Intersection area) | 359 days | Fri 1/11/24 | Sat 25/10/25 | | 100% | | | | | | |
| 510 | Shelter (1 nos) | 289 days | Fri 1/11/24 | Sat 16/8/25 | | 100% | | | | | | |
| 511 | Construction of footing | 14 days | Mon 16/6/25 | Sun 29/6/25 | | 100% | | | | | | |
| 512 | Fabrication of superstructure | 252 days | Fri 1/11/24 | Thu 10/7/25 | | 100% | | | | | | |
| 513 | Construction of superstructure | 37 days | Fri 11/7/25 | Sat 16/8/25 | 512 | 100% | | | | | | |
| 514 | Dwarf Wall DW26 | 28 days | Mon 17/3/25 | Sun 13/4/25 | | 100% | | | | | | |
| 515 | Staircase B7 | 14 days | Thu 2/1/25 | Wed 15/1/25 | | 100% | | | | | | |
| 516 | Edge | 14 days | Mon 24/3/25 | Sun 6/4/25 | 515 | 100% | | | | | | |
| 517 | Soil replacement | 7 days | Mon 7/4/25 | Sun 13/4/25 | 516 | 100% | | | | | | |
| 518 | Irrigation system | 14 days | Mon 14/4/25 | Sun 27/4/25 | 517 | 100% | | | | | | |
| 519 | pavement | 14 days | Mon 28/4/25 | Sun 11/5/25 | 518 | 100% | | | | | | |
| 520 | Finishing to planter wall, seat wall and planter kerb | 167 days | Mon 12/5/25 | Sat 25/10/25 | | 100% | | | | | | |
| 521 | Soft landscaping works | 49 days | Sun 6/7/25 | Sat 23/8/25 | 519 | 100% | | | | | | |
| 522 | Rectification | 40 days? | Tue 11/11/25 | Sat 20/12/25 | | 10% | 20/12 | | | | | |
| 523 | Wing D | 1564 days | Thu 29/21 | Sat 13/12/25 | | 96% | 13/12 | | | | | |
| 524 | Shelter (2 nos) | 1452 days | Thu 29/21 | Sat 23/8/25 | | 97% | | | | | | |
| 525 | Construction of footing | 28 days | Mon 2/9/24 | Sun 29/9/24 | | 100% | | | | | | |
| 526 | Fabrication of superstructure | 45 days | Fri 1/11/24 | Sun 15/12/24 | | 100% | | | | | | |
| 527 | Construction of superstructure | 90 days | Mon 26/5/25 | Sat 23/8/25 | | 100% | | | | | | |
| 528 | Shelter roof | 7 days | Thu 2/9/21 | Wed 8/9/21 | | 20% | | | | | | |
| 529 | U channel and Catchpit (Stage 1, near Site E-1) | 46 days | Tue 30/1/24 | Fri 15/3/24 | | 100% | | | | | | |
| 530 | U channel and Catchpit (Stage 2) | 221 days | Fri 1/11/24 | Mon 9/6/25 | | 100% | | | | | | |
| 531 | Dwarf Wall DW24 & DW25 | 28 days | Mon 2/9/24 | Mon 30/9/24 | | 100% | | | | | | |
| 532 | Lighting system | 425 days | Tue 27/24 | Sat 30/8/25 | | 100% | | | | | | |
| 533 | Cable Duct | 125 days | Tue 2/7/24 | Sun 3/11/24 | | 100% | | | | | | |
| 534 | cable pit | 125 days | Tue 2/7/24 | Sun 3/11/24 | | 100% | | | | | | |
| 535 | Cable Duct (Intersection area) | 22 days | Sat 9/8/25 | Sat 30/8/25 | | 100% | | | | | | |
| 536 | cable pit (Intersection Area) | 22 days | Sat 9/8/25 | Sat 30/8/25 | | 100% | | | | | | |
| 537 | Lamp post footing | 125 days | Tue 2/7/24 | Sun 3/11/24 | | 100% | | | | | | |
| 538 | Installation of lamp post | 112 days | Sun 4/5/25 | Sat 23/8/25 | | 100% | | | | | | |
| 539 | Pillar Box | 60 days | Mon 2/12/24 | Thu 30/1/25 | | 100% | | | | | | |
| 540 | Irrigation system | 45 days | Mon 2/12/24 | Wed 15/1/25 | | 100% | | | | | | |
| 541 | Retaining Wall | 671 days | Tue 30/8/22 | Sun 30/6/24 | | 100% | | | | | | |
| 560 | Staircase D1 | 30 days | Tue 2/7/24 | Wed 31/7/24 | | 100% | | | | | | |
| 561 | Staircase D2 & D3 | 30 days | Wed 2/10/24 | Thu 31/10/24 | | 100% | | | | | | |
| 562 | Planter/community garden) | 166 days | Mon 4/11/24 | Fri 18/4/25 | | 100% | | | | | | |
| 563 | Edge | 75 days | Mon 4/11/24 | Fri 17/1/25 | | 100% | | | | | | |
| 564 | Planter/Seat | 80 days | Thu 2/1/25 | Sat 22/3/25 | | 100% | | | | | | |
| 565 | Soil replacement | 67.5 days | Fri 3/1/25 | Mon 24/3/25 | 564 | 100% | | | | | | |
| 566 | irrigation | 108 days | Mon 13/1/25 | Wed 30/4/25 | | 100% | | | | | | |
| 567 | pavement | 251 days | Mon 10/2/25 | Sat 18/10/25 | | 100% | | | | | | |
| 568 | Finishing to planter wall, seat wall and planter kerb | 215 days | Tue 25/3/25 | Sat 25/10/25 | | 80% | | | | | | |
| 569 | Tree Plaza | 34 days | Mon 8/9/25 | Sat 11/10/25 | | 100% | | | | | | |
| 570 | Soft landscaping works | 223 days | Mon 14/4/25 | Sat 22/11/25 | | 80% | | | | | | |
| 571 | Railing/fence and signage | 40.68 days | Mon 14/7/25 | Sat 13/12/25 | 570 | 48% | 13/12 | | | | | |
| 572 | Store room | 262 days | Fri 3/1/25 | Sun 21/9/25 | | 100% | | | | | | |
| 573 | Store room design | 72 days | Fri 3/1/25 | Sat 15/3/25 | | 100% | | | | | | |
| 574 | Store room foundation | 7 days | Mon 16/6/25 | Sun 22/6/25 | | 100% | | | | | | |
| 575 | Store room installation | 12 days | Mon 28/7/25 | Fri 8/8/25 | 574 | 100% | | | | | | |

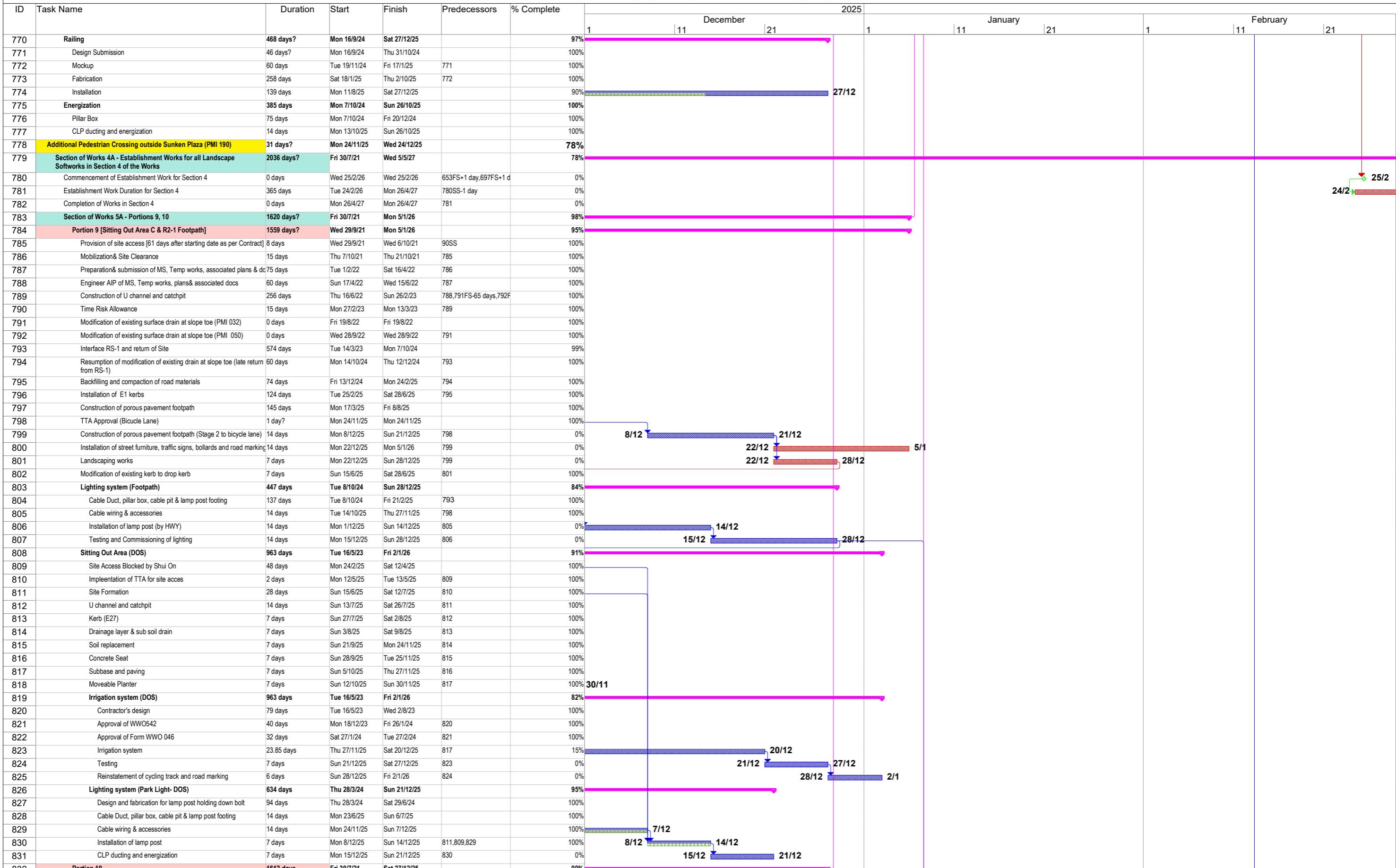
 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | January | | | February | | |
|-----|---|------------|--------------|--------------|---------------|------------|------|----|----|---------|----|----|----------|----|----|
| | | | | | | | 1 | 11 | 21 | 1 | 11 | 21 | 1 | 11 | 21 |
| 576 | Store room E & M | 7 days | Mon 15/9/25 | Sun 21/9/25 | | 100% | | | | | | | | | |
| 577 | Energization | 10 days | Sat 20/12/25 | Mon 29/12/25 | | 50% | | | | | | | | | |
| 578 | CLP ducting and energization | 10 days | Sat 20/12/25 | Mon 29/12/25 | 454 | 50% | | | | | | | | | |
| 579 | Section of Works 2A - Establishment Works for all Landscape Softworks in Section 2 of the Works | 365 days | Sun 14/12/25 | Tue 9/2/27 | | 0% | | | | | | | | | |
| 580 | Commencement of Establishment Work for Section 2 | 0 days | Sun 14/12/25 | Sun 14/12/25 | 523FF+1 day | 0% | | | | | | | | | |
| 581 | Establishment Work Duration for Section 2 | 365 days | Sun 14/12/25 | Tue 9/2/27 | 580SS-1 day | 0% | | | | | | | | | |
| 582 | Completion of Works in Section 2 | 0 days | Tue 9/2/27 | Tue 9/2/27 | 581 | 0% | | | | | | | | | |
| 583 | Section of Works 3 - Portions 1b, 3, 4, 5 | 763 days | Fri 30/7/21 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 584 | Portion 1b | 276 days | Tue 29/11/22 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 585 | Provision of site access [487 days after starting date as per Contract] | 7 days | Tue 29/11/22 | Mon 5/12/22 | 46SS | 100% | | | | | | | | | |
| 586 | Mobilization& Site Clearance | 14 days | Tue 6/12/22 | Mon 19/12/22 | 585 | 100% | | | | | | | | | |
| 587 | Time Risk Allowance | 7 days | Tue 20/12/22 | Mon 26/12/22 | 586 | 100% | | | | | | | | | |
| 588 | PMI 066 | 50 days | Thu 13/7/23 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 589 | Sewerage pipes and manholes | 50 days | Thu 13/7/23 | Thu 31/8/23 | 587 | 100% | | | | | | | | | |
| 590 | Greywater pipes and manholes | 50 days | Thu 13/7/23 | Thu 31/8/23 | 589SS | 100% | | | | | | | | | |
| 591 | Laying of 75mm thick milled asphalt chips | 7 days | Fri 25/8/23 | Thu 31/8/23 | 590FF | 100% | | | | | | | | | |
| 592 | Lighting | 163 days | Wed 22/3/23 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 593 | Application for electricity power supply | 83 days | Wed 22/3/23 | Mon 12/6/23 | | 100% | | | | | | | | | |
| 594 | Lighting design | 140 days | Wed 22/3/23 | Tue 8/8/23 | 593SS | 100% | | | | | | | | | |
| 595 | Installation including ducting, draw pit and lighting | 23 days | Wed 9/8/23 | Thu 31/8/23 | 594,590FF | 100% | | | | | | | | | |
| 596 | Portion 3 | 702 days | Wed 29/9/21 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 597 | Access date | 0 days | Wed 29/9/21 | Wed 29/9/21 | 51SS | 100% | | | | | | | | | |
| 598 | Deferred possession (CE 004 & 006) | 61 days | Wed 29/9/21 | Sun 28/11/21 | | 100% | | | | | | | | | |
| 599 | Provision of site access | 7 days | Mon 29/11/21 | Sun 5/12/21 | 598 | 100% | | | | | | | | | |
| 600 | Mobilization& Site Clearance | 14 days | Mon 6/12/21 | Sun 19/12/21 | 599 | 100% | | | | | | | | | |
| 601 | Preparation& submission of MS, Temp works, associated plans & docs | 52 days | Mon 20/12/21 | Wed 9/2/22 | 600 | 100% | | | | | | | | | |
| 602 | Engineer AIP of MS, Temp works, plans& associated docs | 21 days | Thu 10/2/22 | Wed 2/3/22 | 601 | 100% | | | | | | | | | |
| 603 | Installation of chain link fencing | 92 days | Thu 1/6/23 | Thu 31/8/23 | 602 | 100% | | | | | | | | | |
| 604 | Soft landscaping works - hydroseeding | 30 days | Wed 2/8/23 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 605 | GI works (PMI 006) | 7 days | Mon 3/10/22 | Sun 9/10/22 | | 100% | | | | | | | | | |
| 606 | Additional drainage works (PMI 075) | 30 days | Wed 2/8/23 | Thu 31/8/23 | 603FF,604FF | 100% | | | | | | | | | |
| 607 | Portion 4 | 763 days | Fri 30/7/21 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 608 | Provision of site access [on starting date as per Contract] | 7 days | Fri 30/7/21 | Thu 5/8/21 | 56SS | 100% | | | | | | | | | |
| 609 | Soft landscaping works - hydroseeding | 30 days | Wed 2/8/23 | Thu 31/8/23 | 604FF,613FF | 100% | | | | | | | | | |
| 610 | GI works (PMI 006) | 10 days | Mon 10/10/22 | Wed 19/10/22 | 605 | 100% | | | | | | | | | |
| 611 | Portion 5 | 551 days | Sun 27/2/22 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 612 | Provision of site access [212 days after starting date as per Contract] | 7 days | Sun 27/2/22 | Sat 5/3/22 | 61SS | 100% | | | | | | | | | |
| 613 | Soft landscaping works - hydroseeding | 30 days | Wed 2/8/23 | Thu 31/8/23 | | 100% | | | | | | | | | |
| 614 | Installation of chain link fencing | 31 days | Tue 1/8/23 | Thu 31/8/23 | 613FF | 100% | | | | | | | | | |
| 615 | Section of Works 3A - Establishment Works for all Landscape Softworks in Section 3 of the Works | 365 days | Fri 1/9/23 | Fri 30/8/24 | | 0% | | | | | | | | | |
| 619 | Section of Works 4 - Portions 6, 12 | 1667 days? | Fri 30/7/21 | Sat 28/2/26 | | 89% | | | | | | | | | |
| 620 | Portion 6 | 1423 days? | Sat 29/1/22 | Sun 21/12/25 | | 96% | | | | | | | | | |
| 621 | Provision of site access [183 days after starting date as per Contract] | 0 days | Sat 29/1/22 | Sat 29/1/22 | 73SS | 100% | | | | | | | | | |
| 622 | Deferred possession | 81 days | Sat 29/1/22 | Tue 19/4/22 | 621 | 100% | | | | | | | | | |
| 623 | Mobilization& Site Clearance | 14 days | Wed 20/4/22 | Tue 3/5/22 | 622 | 100% | | | | | | | | | |
| 624 | Issuance of site sketch for retaining wall (Letter C10/500/400739) | 0 days | Wed 14/9/22 | Wed 14/9/22 | 623 | 100% | | | | | | | | | |
| 625 | Drainage works under PMQP 004 | 0 days | Fri 14/10/22 | Fri 14/10/22 | 623 | 100% | | | | | | | | | |
| 626 | Application for electricity power supply | 421 days | Mon 14/11/22 | Mon 8/1/24 | 41SS | 100% | | | | | | | | | |
| 627 | Design Change of Layout (PMI-085) | 1 day | Wed 5/7/23 | Wed 5/7/23 | | 100% | | | | | | | | | |
| 628 | Park Lighting Design | 612 days | Mon 14/11/22 | Wed 17/7/24 | 626SS | 100% | | | | | | | | | |
| 629 | Approval of lighting design by LCSD | 30 days | Thu 18/7/24 | Fri 16/8/24 | 628 | 100% | | | | | | | | | |
| 630 | Time Risk Allowance | 14 days | Fri 14/10/22 | Thu 27/10/22 | 629 | 100% | | | | | | | | | |
| 631 | Retaining wall RWA20 | 618 days | Tue 2/5/23 | Wed 8/1/25 | | 100% | | | | | | | | | |
| 632 | Excavation | 112 days | Tue 2/5/23 | Mon 21/8/23 | | 100% | | | | | | | | | |
| 633 | Blinding layer | 110 days | Tue 9/5/23 | Sat 26/8/23 | 632SS+7 days | 100% | | | | | | | | | |
| 634 | Base slab (21 bays) | 169 days | Tue 16/5/23 | Tue 31/10/23 | 633SS+7 days | 100% | | | | | | | | | |
| 635 | Wall stem (21 bays) | 136 days | Mon 3/7/23 | Wed 15/11/23 | 634SS+10 days | 100% | | | | | | | | | |
| 636 | Additional Sewage System (PMI 086) | 170 days | Thu 30/11/23 | Fri 17/5/24 | 635 | 100% | | | | | | | | | |
| 637 | PMI for Grey Water | 30 days | Sat 18/5/24 | Sun 16/6/24 | 636 | 100% | | | | | | | | | |
| 638 | pipe laying and drainage structure (Stage 1) | 183 days | Wed 31/1/24 | Wed 31/7/24 | | 100% | | | | | | | | | |
| 639 | pipe laying and drainage structure (Stage 2) | 7 days | Thu 2/1/25 | Wed 8/1/25 | | 100% | | | | | | | | | |
| 640 | Backfilling (15 layers) | 117 days | Tue 16/4/24 | | | | | | | | | | | | |

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | |
|-----|--|------------|--------------|--------------|--------------|-------------|----------|---------|----------|------|----|----|
| | | | | | | | December | January | February | 1 | 11 | 21 |
| 642 | Blinding layer (1-13) | 45 days | Fri 1/12/23 | Sun 14/1/24 | | 100% | | | | | | |
| 643 | Base slab (1-13) | 50 days | Mon 18/12/23 | Mon 5/2/24 | 642SS+5 days | 100% | | | | | | |
| 644 | Wall stem (1-13) | 59 days | Tue 2/1/24 | Thu 29/2/24 | 643SS+9 days | 100% | | | | | | |
| 645 | pipe laying and drainage structure | 30 days | Thu 1/8/24 | Fri 30/8/24 | | 100% | | | | | | |
| 646 | Backfilling (1-11) | 69 days | Mon 2/9/24 | Sat 9/11/24 | | 100% | | | | | | |
| 647 | Blinding layer (14-18) | 28 days | Sat 4/5/24 | Fri 31/5/24 | | 100% | | | | | | |
| 648 | Base slab (14-18) | 28 days | Sun 5/5/24 | Sat 1/6/24 | | 100% | | | | | | |
| 649 | Wall stem (14-18) | 45 days | Thu 9/5/24 | Sat 22/6/24 | | 100% | | | | | | |
| 650 | Pipe Laying and Drainage Structure (12-18) | 148 days? | Mon 22/7/24 | Mon 16/12/24 | | 100% | | | | | | |
| 651 | Backfilling (12-18) | 71 days | Mon 2/9/24 | Mon 11/1/24 | | 100% | | | | | | |
| 652 | Railing for RWA 19 & 20 | 177 days | Fri 2/5/25 | Sat 25/10/25 | | 69% | | | | | | |
| 653 | U channel & catchpit (1-11) | 113 days | Mon 10/6/24 | Mon 30/9/24 | | 100% | | | | | | |
| 654 | U channel & catchpit (12-18) | 232 days | Sat 2/11/24 | Sat 21/6/25 | | 100% | | | | | | |
| 655 | edging (1-11) | 144 days | Mon 10/6/24 | Thu 31/10/24 | | 100% | | | | | | |
| 656 | edging (12-18) | 6 days | Mon 18/11/24 | Sat 23/11/24 | | 100% | | | | | | |
| 657 | pavement | 222 days | Mon 9/9/24 | Sat 19/7/25 | | 100% | | | | | | |
| 658 | Finishing | 265 days | Mon 10/3/25 | Sat 29/11/25 | 656 | 69% 9/11 | | | | | | |
| 659 | Soft landscaping works (Stage 1) | 24 days | Mon 2/9/24 | Wed 25/9/24 | | 100% | | | | | | |
| 660 | Soft landscaping works (Stage 2) | 100 days | Mon 23/6/25 | Tue 30/9/25 | | 100% | | | | | | |
| 661 | CCTV inspection, testing and commissioning | 45 days | Thu 2/10/25 | Sat 15/11/25 | | 0% | | | | | | |
| 662 | Irrigation system Submission | 716 days | Tue 16/5/23 | Wed 30/4/25 | | 100% | | | | | | |
| 663 | Contractor's design | 79 days | Tue 16/5/23 | Wed 2/8/23 | | 100% | | | | | | |
| 664 | Approval of WWO542 | 40 days | Wed 1/11/23 | Sun 10/12/23 | 663 | 100% | | | | | | |
| 665 | Approval of Form WWO 046 | 32 days | Mon 11/12/23 | Thu 11/1/24 | 664 | 100% | | | | | | |
| 666 | Approval of WWO542 (amendment) | 30 days | Mon 30/12/24 | Tue 28/1/25 | | 100% | | | | | | |
| 667 | Approval of Form WWO 046 (amendment) | 30 days | Wed 29/1/25 | Thu 27/2/25 | 666 | 100% | | | | | | |
| 668 | Irrigation system | 163 days | Mon 8/7/24 | Wed 30/4/25 | | 100% | | | | | | |
| 669 | Lighting system | 546 days | Mon 24/6/24 | Sun 21/12/25 | | 99% 9/11 | | | | | | |
| 670 | Cable Duct, pillar box, cable pit & lamp post footing | 311 days | Mon 24/6/24 | Wed 30/4/25 | | 100% | | | | | | |
| 671 | Cable wiring & accessories | 83 days | Mon 17/2/25 | Sat 10/5/25 | | 100% | | | | | | |
| 672 | Installation of lamp post | 82 days | Sun 11/5/25 | Thu 31/7/25 | 671 | 100% | | | | | | |
| 673 | Testing and Commissioning of lighting | 7 days | Mon 15/12/25 | Sun 21/12/25 | | 0% | 15/12 | 21/12 | | | | |
| 674 | Portion 12 | 1667 days? | Fri 30/7/21 | Sat 28/2/26 | | 84% | 15/12 | 21/12 | | | | |
| 675 | Provision of site access [on starting date as per Contract] | 7 days | Fri 30/7/21 | Thu 5/8/21 | | 100% | | | | | | |
| 676 | Mobilization & Site Clearance | 14 days | Fri 6/8/21 | Thu 19/8/21 | | 100% | | | | | | |
| 677 | Preparation& submission of MS, Temp works, associated plans & docs | 52 days | Fri 20/8/21 | Sun 10/10/21 | | 100% | | | | | | |
| 678 | Engineer's AIP of MS, Temp works, plans& associated docs | 22 days | Mon 11/10/21 | Mon 1/11/21 | | 100% | | | | | | |
| 679 | Additional GI at Portion 12 (PMI 005) | 15 days | Wed 1/6/22 | Wed 15/6/22 | | 100% | | | | | | |
| 680 | Drainage pipe and manhole | 379 days | Tue 21/1/21 | Tue 15/11/22 | | 100% | | | | | | |
| 681 | Excavation | 364 days | Tue 2/11/21 | Mon 31/10/22 | | 100% | | | | | | |
| 682 | Pipe laying and manhole construction including backfilling | 245 days | Wed 16/3/22 | Tue 15/11/22 | | 100% | | | | | | |
| 683 | Dwarf wall construction (Stage 1) | 105 days | Wed 16/11/22 | Tue 28/2/23 | | 100% | | | | | | |
| 684 | Awaiting for revision of design by PM due to interface | 97 days | Wed 1/3/23 | Mon 5/6/23 | | 100% | | | | | | |
| 685 | Staircase | 796 days? | Tue 15/8/23 | Sat 18/10/25 | | 94% | | | | | | |
| 686 | Footing (S1-10) | 231 days | Tue 15/8/23 | Mon 1/4/24 | | 100% | | | | | | |
| 687 | Slab & Vertical Wall (S1-10) | 258 days | Mon 28/8/23 | Sat 11/5/24 | | 100% | | | | | | |
| 688 | Wing Wall | 70 days? | Sun 12/5/24 | Sat 20/7/24 | | 100% | | | | | | |
| 689 | Seat and railing (precast) | 412 days | Mon 2/9/24 | Sat 18/10/25 | | 80% | | | | | | |
| 690 | Footing (S12-16) | 141 days | Mon 13/5/24 | Mon 30/9/24 | | 100% | | | | | | |
| 691 | Footing (S11) | 14 days | Mon 7/10/24 | Sun 20/10/24 | | 100% | | | | | | |
| 692 | Slab & Vertical & Wing Wall (S12-15) | 123 days | Fri 31/5/24 | Mon 30/9/24 | | 100% | | | | | | |
| 693 | Slab & Vertical & Wing Wall (S11) | 48 days | Mon 21/10/24 | Sat 7/12/24 | 691 | 100% | | | | | | |
| 694 | Slab & Vertical & Wing Wall (S16) | 33 days | Tue 15/4/25 | Sat 17/5/25 | | 100% | | | | | | |
| 695 | Dwarf wall (resumption) - Stage 2 | 286 days | Mon 4/3/24 | Sat 14/12/24 | | 100% | | | | | | |
| 696 | Confirmation of recess cover for u channel | 1 day | Thu 25/4/24 | Thu 25/4/24 | | 100% | | | | | | |
| 697 | U channel & catchpit (Stage 1-S1-16) | 239 days | Mon 15/7/24 | Mon 10/3/25 | | 100% | | | | | | |
| 698 | Edging (Stage1) | 265 days | Mon 26/8/24 | Sat 17/5/25 | | 100% | | | | | | |
| 699 | Paving (Stage1) | 136 days | Sun 18/5/25 | Tue 30/9/25 | 698 | 75% | | | | | | |
| 700 | U channel & catchpit (Stage 2- Civic Plaza) | 59 days | Fri 18/4/25 | Mon 2/2/26 | 711 | 36% | 30/1 | 2/2 | | | | |
| 701 | Edging (Stage 2) | 14 days | Fri 30/1/26 | Mon 16/2/26 | 724 | 0% | 16/2 | 24/2 | | | | |
| 702 | Paving (Stage 2) | 7 days | Mon 16/2/26 | Tue 24/2/26 | 701 | 0% | | | | | | |
| 703 | U channel & catchpit (Stage 3 -Play Area) | 181 days | Mon 2/12/24 | Sat 31/5/25 | | 30% | | | | | | |
| 704 | Edging (Stage 3) | 124.8 days | Sun 13/4/25 | Tue 30/9/25 | 703 | 30% | | | | | | |
| 705 | Paving (Stage 3) | 53 days | Wed 1/10/25 | Sat 22/11/25 | 704 | 30% | | | | | | |

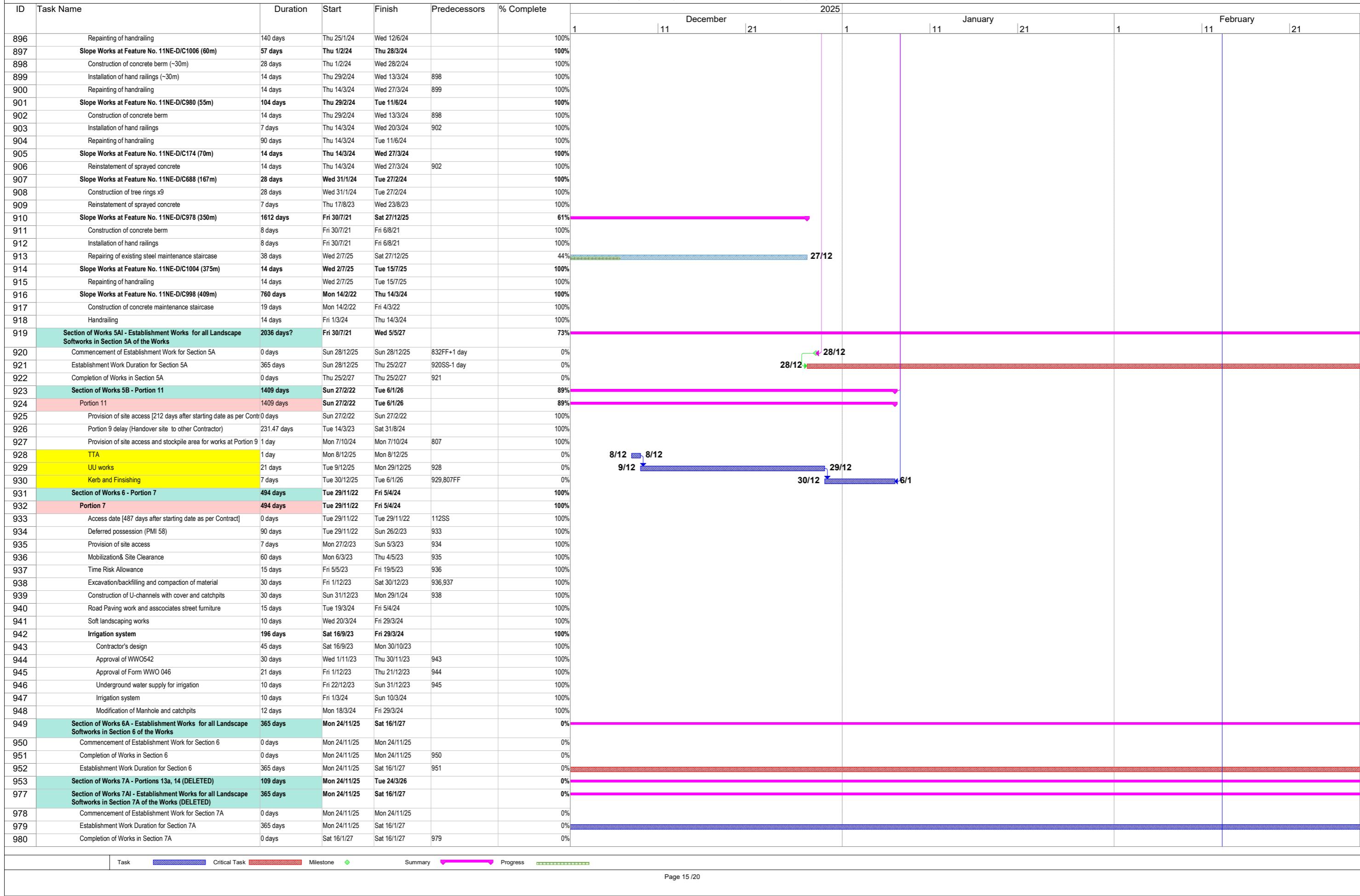
 Task  Critical Task  Milestone  Summary  Progress 

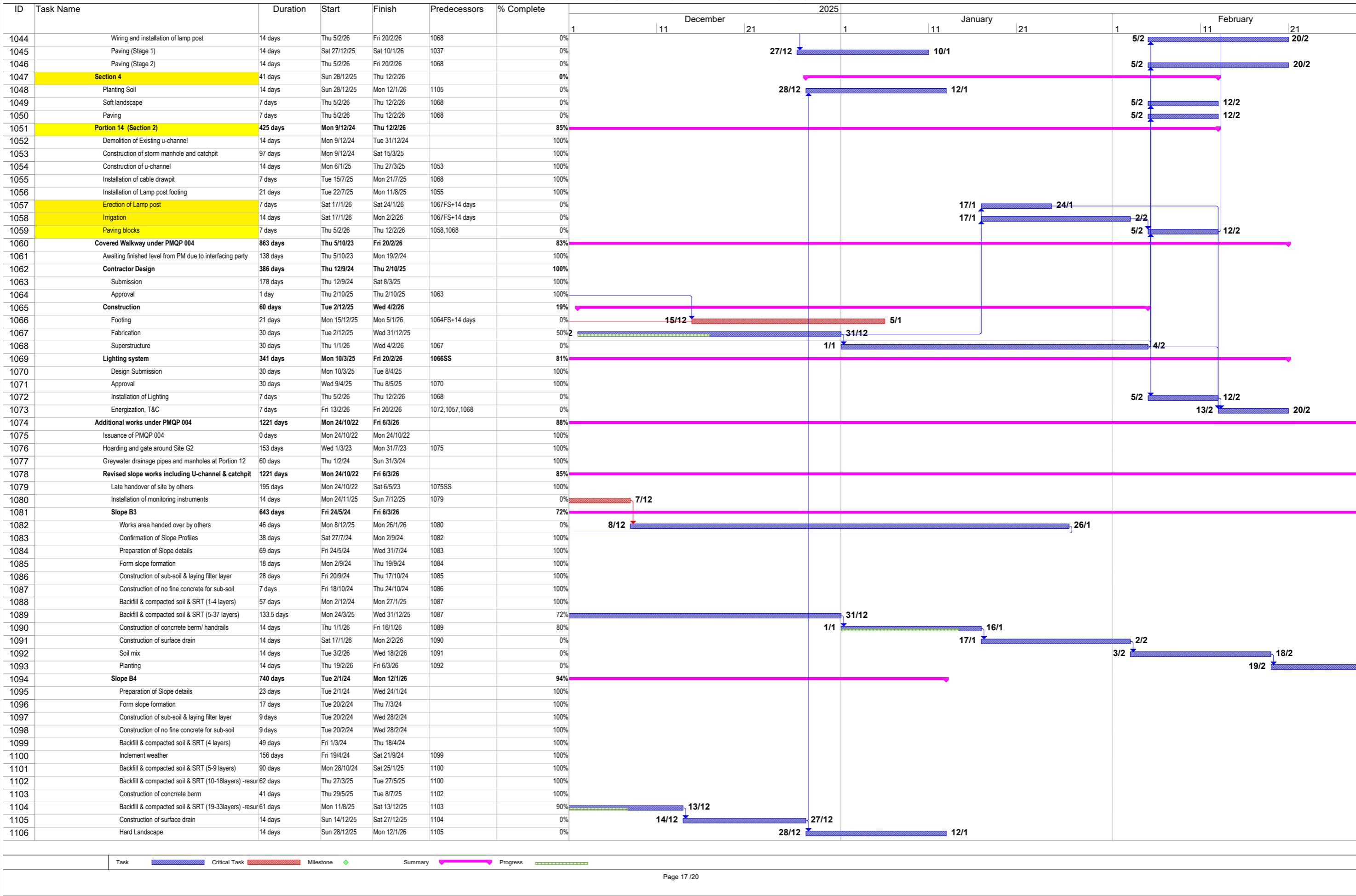



 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | | |
|-----|--|-----------------|---------------------|---------------------|--------------|-------------|----------|---------|----------|------|----|----|--|
| | | | | | | | December | January | February | 1 | 11 | 21 | |
| 833 | Provision of site access [on starting date as per Contract] | 7 days | Fri 30/7/21 | Thu 5/8/21 | 95SS | 100% | | | | | | | |
| 834 | Slope inspection & assessment work | 50 days | Fri 6/8/21 | Fri 24/9/21 | 833 | 100% | | | | | | | |
| 835 | Mobilization, access arrangements, logistic plan & Site Clearance | 52 days | Sat 25/9/21 | Mon 15/11/21 | 834 | 100% | | | | | | | |
| 836 | Preparation & submission of MS, Temp works, associated plans & docs | 37 days | Tue 16/11/21 | Wed 22/12/21 | 835 | 100% | | | | | | | |
| 837 | Time Risk Allowance | 16 days | Thu 23/12/21 | Fri 7/1/22 | 836 | 100% | | | | | | | |
| 838 | Main access blocked by C1at hiking trail | 181 days | Mon 3/7/23 | Sat 30/12/23 | | 100% | | | | | | | |
| 839 | Engineer's AIP of MS, Temp.works, plans & associated docs | 21 days | Sat 8/1/22 | Fri 28/1/22 | 837 | 100% | | | | | | | |
| 840 | Demolition and removal of disused water pipe and sprinkler system | 160 days | Sat 29/1/22 | Thu 7/7/22 | 839 | 100% | | | | | | | |
| 841 | Repair of cracks at drainage channel and concrete berm | 884 days | Thu 1/9/22 | Fri 31/1/25 | 840 | 100% | | | | | | | |
| 842 | Reinstatement of joint sealant at drainage channel | 899 days | Fri 16/9/22 | Sun 2/3/25 | 840 | 100% | | | | | | | |
| 843 | Installation of display sign for slope registration | 31 days | Sun 31/8/25 | Tue 30/9/25 | | 100% | | | | | | | |
| 844 | Slope Works at Feature No. 11NE-D/C947 (420m) | 568 days | Sun 31/12/23 | Sun 20/7/25 | | 100% | | | | | | | |
| 845 | Removal of damaged wire mesh and installation of wire mesh (Stage 1 at +330 mPD) | 30 days | Sun 31/12/23 | Mon 29/1/24 | 838 | 100% | | | | | | | |
| 846 | Installation of wire mesh (Stage 2 at +330mPD) | 30 days | Tue 15/10/24 | Wed 13/11/24 | | 100% | | | | | | | |
| 847 | Filling of void with cement soil | 7 days | Tue 18/2/25 | Mon 24/2/25 | 882 | 100% | | | | | | | |
| 848 | Reinstatement of concrete berm | 14 days | Mon 24/3/25 | Sun 6/4/25 | 847 | 100% | | | | | | | |
| 849 | Installation of hand railings | 7 days | Sat 21/9/24 | Fri 27/9/24 | 848 | 100% | | | | | | | |
| 850 | Repainting of handrailing | 19 days | Wed 2/7/25 | Sun 20/7/25 | | 100% | | | | | | | |
| 851 | Slope Works at Feature No. 11NE-D/C976 (185m) | 298 days | Sat 21/9/24 | Tue 15/7/25 | | 100% | | | | | | | |
| 852 | Construction of concrete berm | 21 days | Sat 21/9/24 | Fri 11/10/24 | 848 | 100% | | | | | | | |
| 853 | Installation of hand railings | 7 days | Sat 12/10/24 | Fri 18/10/24 | 852 | 100% | | | | | | | |
| 854 | Repainting of existing steel maintenance staircase | 7 days | Wed 2/7/25 | Tue 8/7/25 | | 100% | | | | | | | |
| 855 | Removal of existing handrailing and steel landing plates and re-construction | 7 days | Wed 9/7/25 | Tue 15/7/25 | 854 | 100% | | | | | | | |
| 856 | Construction of wire mesh | 73 days | Thu 2/1/25 | Sat 15/3/25 | | 100% | | | | | | | |
| 857 | Slope Works at Feature No. 11NE-D/C977 (300m) | 409 days | Sun 26/5/24 | Tue 8/7/25 | | 100% | | | | | | | |
| 858 | Construction of wire mesh | 28 days | Sat 1/2/25 | Sat 29/3/25 | 856 | 100% | | | | | | | |
| 859 | Construction of concrete berm | 14 days | Sat 12/10/24 | Fri 25/10/24 | 852 | 100% | | | | | | | |
| 860 | Construction of handrailing | 7 days | Sun 26/5/24 | Sat 1/6/24 | | 100% | | | | | | | |
| 861 | Repair drainage channel | 7 days | Wed 2/7/25 | Tue 8/7/25 | | 100% | | | | | | | |
| 862 | Slope Works at Feature No. 11NE-D/C986 (190m) | 432 days | Fri 3/5/24 | Tue 8/7/25 | | 100% | | | | | | | |
| 863 | Filling of void with cement soil | 7 days | Wed 2/7/25 | Tue 8/7/25 | | 100% | | | | | | | |
| 864 | Construction of concrete berm | 14 days | Fri 3/5/24 | Thu 16/5/24 | | 100% | | | | | | | |
| 865 | Installation of hand railings | 6 days | Fri 26/7/24 | Wed 31/7/24 | | 100% | | | | | | | |
| 866 | Construction of wire mesh | 55 days | Mon 20/1/25 | Sat 15/3/25 | | 100% | | | | | | | |
| 867 | Slope Works at Feature No. 11NE-D/C1026 (60m) | 441 days | Fri 18/8/23 | Thu 31/10/24 | | 100% | | | | | | | |
| 868 | Filling of void with cement soil | 30 days | Wed 1/1/23 | Thu 30/11/23 | | 100% | | | | | | | |
| 869 | Installation of non-biodegradable erosion control mat | 30 days | Fri 1/12/23 | Sat 30/12/23 | 868 | 100% | | | | | | | |
| 870 | Hydroseeding | 30 days | Wed 2/10/24 | Thu 31/10/24 | | 100% | | | | | | | |
| 871 | Repainting of handrailing | 90 days | Fri 18/8/23 | Wed 15/11/23 | | 100% | | | | | | | |
| 872 | Slope Works at Feature No. 11NE-D/C987 (90m) | 863 days | Fri 8/7/22 | Sat 16/11/24 | | 100% | | | | | | | |
| 873 | Construction of concrete berm | 30 days | Mon 1/1/24 | Tue 30/1/24 | 868 | 100% | | | | | | | |
| 874 | Installation of hand railings | 7 days | Thu 8/2/24 | Wed 14/2/24 | 873 | 100% | | | | | | | |
| 875 | Installation of non-biodegradable erosion control mat | 30 days | Fri 8/7/22 | Sat 6/8/22 | 840 | 100% | | | | | | | |
| 876 | Hydroseeding | 16 days | Fri 1/11/24 | Sat 16/11/24 | | 100% | | | | | | | |
| 877 | Repainting of handrailing | 90 days | Fri 18/8/23 | Wed 15/11/23 | | 100% | | | | | | | |
| 878 | Slope Works at Feature No. 11NE-D/C871 (260m) | 454 days | Sat 1/6/24 | Thu 28/8/25 | | 100% | | | | | | | |
| 879 | Construction of lockable gate | 44 days | Wed 2/7/25 | Thu 14/8/25 | 883 | 100% | | | | | | | |
| 880 | Removal/Repair of existing damaged hand railings | 14 days | Fri 15/8/25 | Thu 28/8/25 | 879 | 100% | | | | | | | |
| 881 | Installation of hand railings | 60 days | Sat 1/6/24 | Tue 30/7/24 | | 100% | | | | | | | |
| 882 | Reinstatement of concrete berm | 7 days | Mon 23/6/25 | Sun 29/6/25 | | 100% | | | | | | | |
| 883 | Repainting of handrailing | 85 days | Mon 6/1/25 | Mon 31/3/25 | | 100% | | | | | | | |
| 884 | Slope Works at Feature No. 11NE-D/C979 (45m) | 294 days | Fri 18/8/23 | Thu 6/6/24 | | 100% | | | | | | | |
| 885 | Construction of concrete berm | 14 days | Fri 17/5/24 | Thu 30/5/24 | | 100% | | | | | | | |
| 886 | Installation of hand railings | 7 days | Fri 31/5/24 | Thu 6/6/24 | 885 | 100% | | | | | | | |
| 887 | Repainting of handrailing | 90 days | Fri 18/8/23 | Wed 15/11/23 | | 100% | | | | | | | |
| 888 | Slope Works at Feature No. 11NE-D/C988 (370m) | 21 days | Fri 31/5/24 | Thu 20/6/24 | | 100% | | | | | | | |
| 889 | Construction of concrete berm | 14 days | Fri 31/5/24 | Thu 13/6/24 | 885 | 100% | | | | | | | |
| 890 | Installation of hand railings | 7 days | Fri 14/6/24 | Thu 20/6/24 | 889 | 100% | | | | | | | |
| 891 | Slope Works at Feature No. 11NE-D/C1003 (265m) | 28 days | Fri 14/6/24 | Thu 11/7/24 | | 100% | | | | | | | |
| 892 | Removal of disused pipes | 21 days | Fri 14/6/24 | Thu 4/7/24 | 889 | 100% | | | | | | | |
| 893 | Installation of hand railings | 7 days | Fri 5/7/24 | Thu 11/7/24 | 892 | 100% | | | | | | | |
| 894 | Slope Works at Feature No. 11NE-D/FR657 (63m) | 169 days | Thu 25/1/24 | Thu 11/7/24 | | 100% | | | | | | | |
| 895 | Filling of void with cement soil | 7 days | Fri 5/7/24 | Thu 11/7/24 | 892 | 100% | | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress <img alt="Progress bar







| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | 2026 | | | | | |
|------|---|-------------|--------------|--------------|--------------|------------|----------|---------|----------|------|----|----|--|--|--|
| | | | | | | | December | January | February | 1 | 11 | 21 | | | |
| 1168 | Underground water supply for irrigation | 60 days | Sat 23/9/23 | Tue 21/11/23 | | 100% | | | | | | | | | |
| 1169 | Irrigation system | 45 days | Mon 3/3/25 | Wed 16/4/25 | | 100% | | | | | | | | | |
| 1170 | Section of Works 7B1 - Establishment Works for all Landscape Softworks in Section 7B of the Works | 2036 days? | Fri 30/7/21 | Wed 5/5/27 | | 78% | 2025 | | | | | | | | |
| 1171 | Commencement of Establishment Work for Section 7B | 0 days | Fri 6/3/26 | Fri 6/3/26 | 987 | 0% | | | | | | | | | |
| 1172 | Establishment Work Duration for Section 7B | 365 days | Fri 6/3/26 | Wed 5/5/27 | 1171SS-1 day | 0% | | | | | | | | | |
| 1173 | Completion of Works in Section 7B | 0 days | Wed 5/5/27 | Wed 5/5/27 | 1172 | 0% | | | | | | | | | |
| 1174 | Section of Works 8 - Portion 16 | 556 days | Thu 16/6/22 | Sat 23/12/23 | | 100% | | | | | | | | | |
| 1175 | Portion 16 | 556 days | Thu 16/6/22 | Sat 23/12/23 | | 100% | | | | | | | | | |
| 1176 | Site access date [321 days after starting date as per Contract] | 0 days | Thu 16/6/22 | Thu 16/6/22 | 151SS | 100% | | | | | | | | | |
| 1177 | Time Risk Allowance | 24 days | Thu 16/6/22 | Sat 9/7/22 | 1176 | 100% | | | | | | | | | |
| 1178 | Late handover of site by others | 350 days | Thu 16/6/22 | Wed 31/5/23 | 1177 | 100% | | | | | | | | | |
| 1179 | Mobilization& Site Clearance | 4 days | Thu 1/6/23 | Sun 4/6/23 | 1178 | 100% | | | | | | | | | |
| 1180 | Removal of existing rock slope | 45 days | Mon 5/6/23 | Wed 19/7/23 | 1179 | 100% | | | | | | | | | |
| 1181 | Construction of fill slope A7 | 90 days | Thu 20/7/23 | Tue 17/10/23 | 1180 | 100% | | | | | | | | | |
| 1182 | Construction of fill slope A8 | 80 days | Sun 30/7/23 | Tue 17/10/23 | 1181FF | 100% | | | | | | | | | |
| 1183 | Construction of slope surface drainage system | 45 days | Wed 18/10/23 | Fri 1/12/23 | 1181 | 100% | | | | | | | | | |
| 1184 | Hydroseeding | 22 days | Sat 2/12/23 | Sat 23/12/23 | 1183 | 100% | | | | | | | | | |
| 1185 | Chain link fence | 30 days | Fri 24/11/23 | Sat 23/12/23 | 1183FF | 100% | | | | | | | | | |
| 1186 | Thrust boring of additional pipe from S201D to MHT1 | 78 days | Mon 2/10/23 | Mon 18/12/23 | | 100% | | | | | | | | | |
| 1187 | Section of Works 8A - Establishment Works for all Landscape Softworks in Section 8 of the Works | 365 days | Fri 27/9/24 | Fri 26/9/25 | | 0% | | | | | | | | | |
| 1188 | Commencement of Establishment Work for Section 8 | 0 days | Fri 27/9/24 | Fri 27/9/24 | 1189SS | 0% | | | | | | | | | |
| 1189 | Establishment Work Duration for Section 8 | 365 days | Fri 27/9/24 | Fri 26/9/25 | 1184 | 0% | | | | | | | | | |
| 1190 | Completion of Works in Section 8 | 0 days | Fri 26/9/25 | Fri 26/9/25 | 1189FF | 0% | | | | | | | | | |
| 1191 | Section of Works 9 - Portion 17 | 1491.1 days | Fri 30/7/21 | Fri 29/8/25 | | 100% | | | | | | | | | |
| 1192 | Portion 17 | 1491.1 days | Fri 30/7/21 | Fri 29/8/25 | | 100% | | | | | | | | | |
| 1193 | Provision of site access [212 days after starting date as per Contract] | 0 days | Sun 27/2/22 | Sun 27/2/22 | 162SS | 100% | | | | | | | | | |
| 1194 | Deferred possession | 30 days | Sun 27/2/22 | Mon 28/3/22 | 1193 | 100% | | | | | | | | | |
| 1195 | Slope inspection & assessment work & Tree Survey | 23 days | Tue 29/3/22 | Wed 20/4/22 | 1194 | 100% | | | | | | | | | |
| 1196 | Mobilization, access & Site Clearance | 15 days | Thu 21/4/22 | Thu 5/5/22 | 1195 | 100% | | | | | | | | | |
| 1197 | Time Risk Allowance | 14 days | Fri 6/5/22 | Thu 19/5/22 | 1195,1196 | 100% | | | | | | | | | |
| 1198 | Access blocked by C1 at hiking trail | 181 days | Mon 3/7/23 | Sat 30/12/23 | | 100% | | | | | | | | | |
| 1199 | Demolition and removal of disused water pipe and sprinkler sy50 days | Fri 20/5/22 | Fri 8/7/22 | 1197 | 100% | | | | | | | | | | |
| 1200 | Repair of cracks at drainage channel and concrete berm | 777 days | Sat 14/1/23 | Fri 28/2/25 | 1199 | 100% | | | | | | | | | |
| 1201 | Reinstatemnt of joint sealant at drainage channel | 776 days | Sun 15/1/23 | Fri 28/2/25 | | 100% | | | | | | | | | |
| 1202 | Installation of display sign for slope registration | 60 days | Tue 31/12/24 | Fri 28/2/25 | | 100% | | | | | | | | | |
| 1203 | Reinstatement of eroded soil berm due to inclement weather (PMI 117) | 128 days | Thu 7/9/23 | Fri 12/1/24 | | 100% | | | | | | | | | |
| 1204 | Slope Works at Feature No. 11NE-D/C948 (310m) | 352 days | Sun 31/12/23 | Mon 16/12/24 | | 100% | | | | | | | | | |
| 1205 | Construction of concrete berm | 14 days | Thu 25/7/24 | Wed 7/8/24 | 1257 | 100% | | | | | | | | | |
| 1206 | Repainting of existing steel maintenance staircase | 7 days | Tue 10/12/24 | Mon 16/12/24 | 1205 | 100% | | | | | | | | | |
| 1207 | Construction of wire mesh | 352 days | Sun 31/12/23 | Mon 16/12/24 | 1198 | 100% | | | | | | | | | |
| 1208 | Slope Works at Feature No. 11NE-D/C949 (603m) | 1154 days | Fri 30/7/21 | Wed 25/9/24 | | 100% | | | | | | | | | |
| 1209 | Construction of concrete berm | 14 days | Fri 30/7/21 | Thu 12/8/21 | | 100% | | | | | | | | | |
| 1210 | Installation of hand railings | 7 days | Fri 13/8/21 | Thu 19/8/21 | 1209 | 100% | | | | | | | | | |
| 1211 | Construction of wire mesh | 30 days | Tue 27/8/24 | Wed 25/9/24 | 1207,1210 | 100% | | | | | | | | | |
| 1212 | Slope Works at Feature No. 11NE-D/C981 (390m) | 1170 days | Fri 13/8/21 | Fri 25/10/24 | | 100% | | | | | | | | | |
| 1213 | Construction of concrete berm | 14 days | Fri 13/8/21 | Thu 26/8/21 | 1209 | 100% | | | | | | | | | |
| 1214 | Installation of hand railings | 7 days | Fri 27/8/21 | Thu 29/9/21 | 1213 | 100% | | | | | | | | | |
| 1215 | Construction of wire mesh | 30 days | Thu 26/9/24 | Fri 25/10/24 | 1211 | 100% | | | | | | | | | |
| 1216 | Slope Works at Feature No. 11NE-B/C1013 (340m) | 1186 days | Fri 27/8/21 | Sun 24/11/24 | | 100% | | | | | | | | | |
| 1217 | Construction of wire mesh | 30 days | Sat 26/10/24 | Sun 24/11/24 | 1215 | 100% | | | | | | | | | |
| 1218 | Construction of concrete berm | 14 days | Fri 27/8/21 | Thu 9/9/21 | 1213 | 100% | | | | | | | | | |
| 1219 | Installation of hand railings | 7 days | Fri 10/9/21 | Thu 16/9/21 | 1218 | 100% | | | | | | | | | |
| 1220 | Construction of concrete maintenance staircase with hand i33 days | Mon 19/2/24 | Fri 22/3/24 | | | 100% | | | | | | | | | |
| 1221 | Slope Works at Feature No. 11NE-B/C902 (360m) | 326 days | Wed 24/1/24 | Sat 14/1/24 | | 100% | | | | | | | | | |
| 1222 | Filling of void with concrete | 20 days | Mon 25/11/24 | Sat 14/12/24 | | 100% | | | | | | | | | |
| 1223 | Construction of concrete berm | 14 days | Wed 24/1/24 | Tue 6/2/24 | | 100% | | | | | | | | | |
| 1224 | Installation of hand railings | 7 days | Wed 7/2/24 | Tue 13/2/24 | | 100% | | | | | | | | | |
| 1225 | Repainting of existing steel maintenance staircase | 14 days | Thu 28/3/24 | Wed 10/4/24 | | 100% | | | | | | | | | |
| 1226 | Slope Works at Feature No. 11NE-B/C224 (40m) | 14 days | Wed 16/10/24 | Tue 29/10/24 | | 100% | | | | | | | | | |
| 1227 | Reinstatement of sprayed concrete | 14 days | Wed 16/10/24 | Tue 29/10/24 | | 100% | | | | | | | | | |
| 1228 | Slope Works at Feature No. 11NE-B/C225 (60m) | 117 days | Wed 30/10/24 | Sun 23/2/25 | | 100% | | | | | | | | | |
| 1229 | Reinstatement of sprayed concrete | 14 days | Wed 30/10/24 | Tue 12/11/24 | 1227 | 100% | | | | | | | | | |

 Task  Critical Task  Milestone  Summary  Progress 

| ID | Task Name | Duration | Start | Finish | Predecessors | % Complete | 2025 | | | January | | | February | | |
|------|--|-------------------|---------------------|---------------------|--------------|-------------|------|----|----|---------|----|----|----------|----|----|
| | | | | | | | 1 | 11 | 21 | 1 | 11 | 21 | 1 | 11 | 21 |
| 1230 | Reinstatement of damaged granite stone planter wall and granite stone facing | 7 days | Mon 17/2/25 | Sun 23/2/25 | | 100% | | | | | | | | | |
| 1231 | Make good and provide cover for existing damaged U-channel | 18 days | Mon 13/1/25 | Thu 30/1/25 | | 100% | | | | | | | | | |
| 1232 | Slope Works at Feature No. 11NE-B/C1014 (90m) | 14 days | Wed 13/11/24 | Tue 26/11/24 | | 100% | | | | | | | | | |
| 1233 | Remove water pump & electric box | 14 days | Wed 13/11/24 | Tue 26/11/24 | 1229 | 100% | | | | | | | | | |
| 1234 | Slope Works at Feature No. 11NE-B/C901 (290m) | 518 days | Fri 2/6/23 | Thu 31/10/24 | | 100% | | | | | | | | | |
| 1235 | Installation of non-biodegradable erosion control mat | 90 days | Fri 2/6/23 | Wed 30/8/23 | | 100% | | | | | | | | | |
| 1236 | Hydroseeding | 30 days | Wed 2/10/24 | Thu 31/10/24 | | 100% | | | | | | | | | |
| 1237 | Installation of hand railings | 36 days | Thu 7/9/23 | Thu 12/10/23 | | 100% | | | | | | | | | |
| 1238 | Repainting of handrailing | 20 days | Sun 22/10/23 | Fri 10/11/23 | | 100% | | | | | | | | | |
| 1239 | Filling of void with concrete | 37 days | Tue 2/1/24 | Wed 7/2/24 | | 100% | | | | | | | | | |
| 1240 | Reinstatement of concrete berm | 14 days | Thu 6/6/24 | Wed 19/6/24 | 1239 | 100% | | | | | | | | | |
| 1241 | Construction of lockable gate | 7 days | Thu 20/6/24 | Wed 26/6/24 | 1240 | 100% | | | | | | | | | |
| 1242 | Slope Works at Feature No. 11NE-B/C900 (335m) | 892 days | Sat 9/7/22 | Mon 16/12/24 | | 100% | | | | | | | | | |
| 1243 | Installation of non-biodegradable erosion control mat | 78 days | Sun 12/2/23 | Sun 30/4/23 | | 100% | | | | | | | | | |
| 1244 | Hydroseeding | 30 days | Fri 1/11/24 | Sat 30/11/24 | | 100% | | | | | | | | | |
| 1245 | Installation of hand railings | 60 days | Sat 9/7/22 | Tue 6/9/22 | | 100% | | | | | | | | | |
| 1246 | Reinstatement of concrete berm | 7 days | Thu 20/6/24 | Wed 26/6/24 | 1240 | 100% | | | | | | | | | |
| 1247 | Repainting of handrailing | 30 days | Wed 10/5/23 | Thu 8/6/23 | | 100% | | | | | | | | | |
| 1248 | Construction of Wire mesh | 15 days | Mon 2/12/24 | Mon 16/12/24 | | 100% | | | | | | | | | |
| 1249 | Slope Works at Feature No. 11NE-B/C899 (280m) | 388 days | Mon 19/6/23 | Wed 10/7/24 | | 100% | | | | | | | | | |
| 1250 | Filling of voids with concrete | 7 days | Thu 27/6/24 | Wed 3/7/24 | 1246 | 100% | | | | | | | | | |
| 1251 | Construction of concrete berm | 7 days | Thu 4/7/24 | Wed 10/7/24 | 1250 | 100% | | | | | | | | | |
| 1252 | Installation of hand railings | 60 days | Mon 19/6/23 | Thu 17/8/23 | | 100% | | | | | | | | | |
| 1253 | Repainting of handrailing | 30 days | Thu 6/7/23 | Fri 4/8/23 | | 100% | | | | | | | | | |
| 1254 | Slope Works at Feature No. 11NE-D/C872 (250m) | 892 days | Sat 9/7/22 | Mon 16/12/24 | | 100% | | | | | | | | | |
| 1255 | Installation of hand railings | 60 days | Sat 9/7/22 | Tue 6/9/22 | | 100% | | | | | | | | | |
| 1256 | Repainting of handrailing | 30 days | Sun 2/4/23 | Mon 1/5/23 | | 100% | | | | | | | | | |
| 1257 | Reinstatement of concrete berm | 7 days | Tue 10/12/24 | Mon 16/12/24 | 1258 | 100% | | | | | | | | | |
| 1258 | Filling of void with concrete | 7 days | Tue 3/12/24 | Mon 9/12/24 | 1251 | 100% | | | | | | | | | |
| 1259 | Slope Works at Feature No. 11NE-C/900 (Stage 2) | 45 days | Thu 2/1/25 | Sat 15/2/25 | | 100% | | | | | | | | | |
| 1260 | Installation of non-biodegradable erosion control mat | 45 days | Thu 2/1/25 | Sat 15/2/25 | | 100% | | | | | | | | | |
| 1261 | Slope Works at Feature No. 11NE-B/C903 | 30 days | Mon 2/12/24 | Tue 31/12/24 | | 100% | | | | | | | | | |
| 1262 | Installation of non-biodegradable erosion control mat | 30 days | Mon 2/12/24 | Tue 31/12/24 | | 100% | | | | | | | | | |
| 1263 | Defects Rectification Works | 26.1 days | Sun 3/8/25 | Fri 29/8/25 | | 100% | | | | | | | | | |
| 1264 | Section of Works 9A - Establishment Works for all Landscape Softworks in Section 9 of the Works | 365 days | Mon 24/11/25 | Sat 16/1/27 | | 0% | 0% | | | | | | | | |
| 1265 | Commencement of Establishment Work for Section 9 | 0 days | Mon 24/11/25 | Mon 24/11/25 | | 0% | | | | | | | | | |
| 1266 | Establishment Work Duration for Section 9 | 365 days | Mon 24/11/25 | Sat 16/1/27 | 1265 | 0% | 0% | | | | | | | | |
| 1267 | Completion of Works in Section 9 | 0 days | Sat 16/1/27 | Sat 16/1/27 | 1266 | 0% | | | | | | | | | |
| 1268 | Section of Works 10 - All Tree Protection and Preservation Works | 1202 days? | Fri 30/7/21 | Tue 12/11/24 | | 69% | | | | | | | | | |
| 1269 | Commencement of All Tree Protection and Preservation Work | 0 days | Fri 30/7/21 | Fri 30/7/21 | | 100% | | | | | | | | | |
| 1270 | All Tree Protection and Preservation Work | 1202 days | Fri 30/7/21 | Tue 12/11/24 | | 69% | | | | | | | | | |
| 1271 | Completion of All Tree Protection and Preservation Work | 0 days | Tue 12/11/24 | Tue 12/11/24 | 1270 | 0% | | | | | | | | | |

Appendix D

Monitoring Locations for Impact Monitoring

**Monitoring Locations
for
Contract 1 (NE/2016/01)**

NO SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.
ALL RIGHTS RESERVED.
© DYE ARUP X



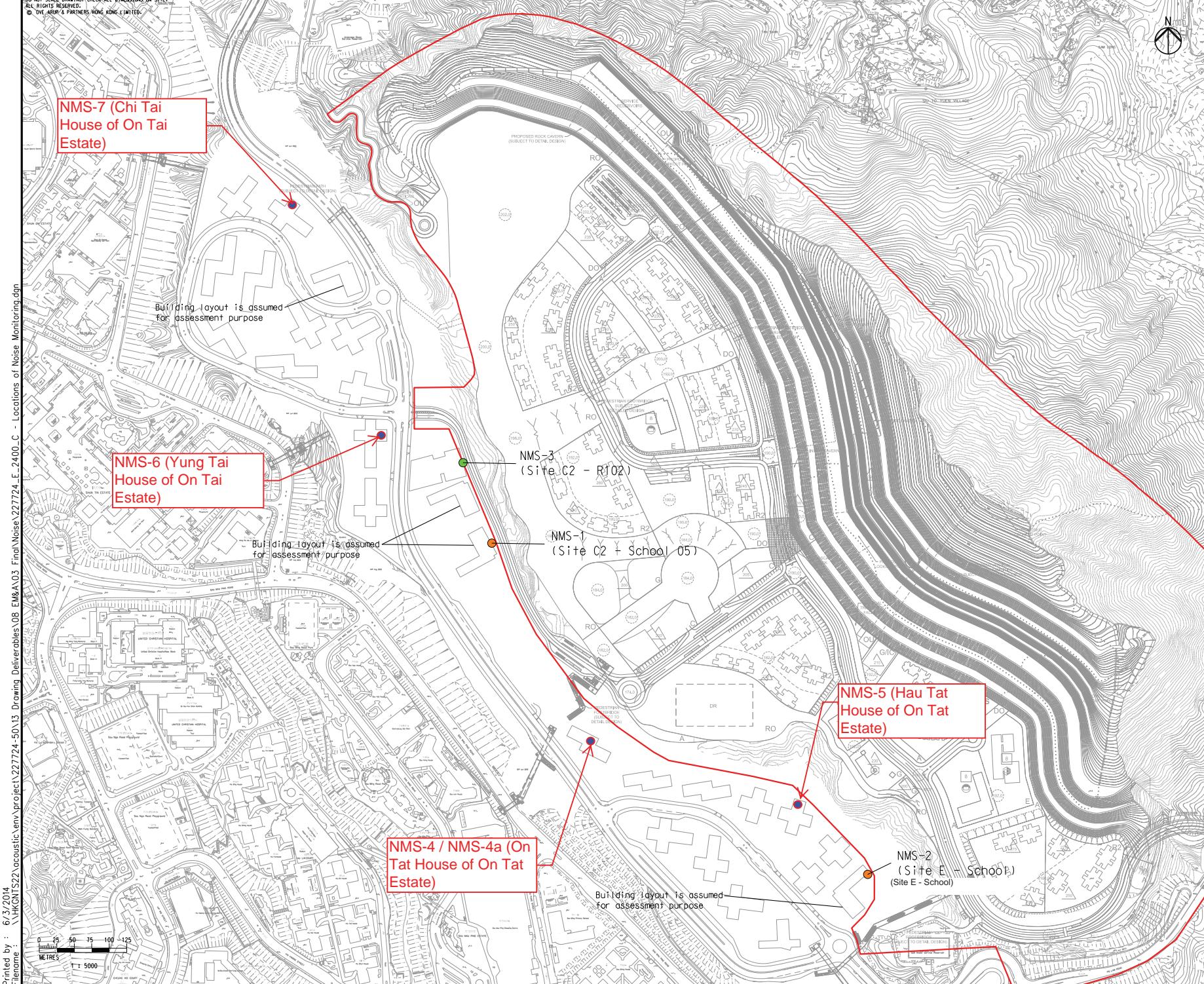
HVS in AMS-1 for 24-Hour TSP

Legend

- Study Area (Red Box)
- 500m Assessment Area (Dashed Box)
- Dust Monitoring Locations (Red Dot)

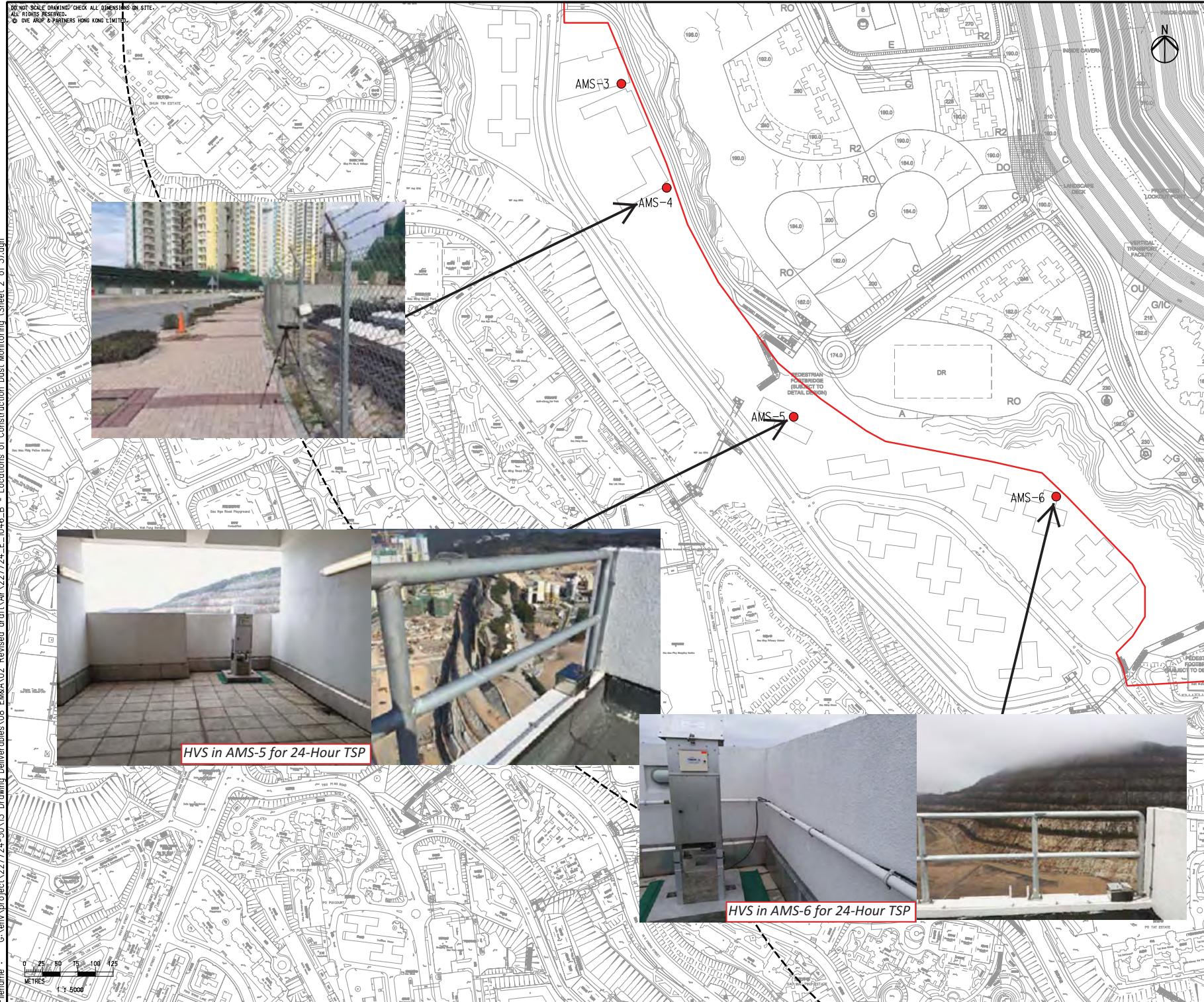


| | | |
|---|--------------|-------------|
| | | |
| B | SECOND ISSUE | GL 03/14 |
| A | FIRST ISSUE | GL 10/13 |
| Rev | Description | By Date |
| Consultant | | |
| ARUP | | |
| Contract No. and Title | | |
| Agreement No. CE 18/2012(CE) | | |
| Development of Anderson Road Quarry - Investigation | | |
| Drawing title | | |
| Locations of Construction Dust Monitoring (Sheet 1 of 3) | | |
| Drawing no. | | |
| 227724/E/1045 | | |
| Rev. B | | |
| Drawn | Date | Checked |
| 03/14 | | Approved |
| GL | TC | ST |
| Scale | | Status |
| 1:5000 | a3 | PRELIMINARY |

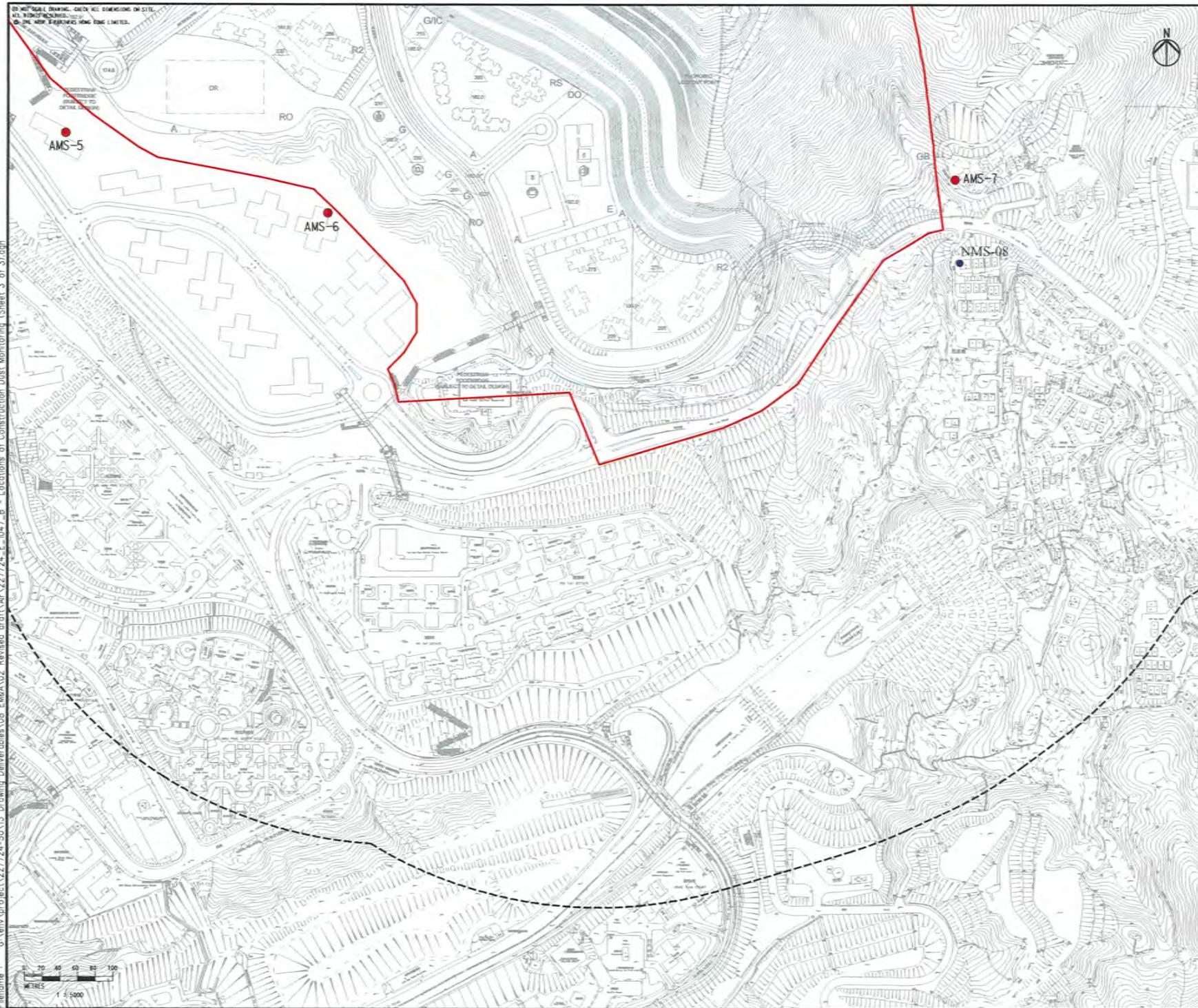


- Legend
- Study Area
 - Construction Noise Monitoring Location
 - Construction and Operational Road Traffic Noise Monitoring Location
 - Review Noise monitoring Location

| | | | | | | |
|---|---------------------|---------|----------|--|--|--|
| C | THIRD ISSUE | GL | 05/14 | | | |
| B | SECOND ISSUE | GL | 03/14 | | | |
| A | FIRST ISSUE | GL | 10/13 | | | |
| Rev | Description By Date | | | | | |
| Consultant | | | | | | |
| ARUP | | | | | | |
| Contract No. and Title | | | | | | |
| Agreement No. CE 18/2012(CE) | | | | | | |
| Development of Anderson Road Quarry - Investigation | | | | | | |
| Drawing title | | | | | | |
| Locations of Noise Monitoring | | | | | | |
| Drawing no. | | | | | | |
| 227724/E/2400 | | | Rev. C | | | |
| Drawn | Date | Checked | Approved | | | |
| GL | 05/14 | ST | ST | | | |
| Scale | 1:5000 @A3 | Status | | | | |
| PRELIMINARY | | | | | | |



| | | | |
|---|--------------------|---|-------------|
| | | | |
| B | SECOND ISSUE | GL | 03/14 |
| A | FIRST ISSUE | GL | 10/13 |
| Rev | Description | By | Date |
| Consultant | | | |
| ARUP | | | |
| Contract No. and Title | | | |
| Agreement No. CE 18/2012(CE) | | | |
| Development of Anderson Road Quarry - Investigation | | | |
| Drawing title | | | |
| Locations of Construction Dust Monitoring (Sheet 2 of 3) | | | |
| Drawing no. 227724/E/1046 Rev. B | | | |
| Drawn GL | Date 03/14 | Checked TC | Approved ST |
| Scale 1:5000 a43 | Status PRELIMINARY | | |
| COPYRIGHT RESERVED | | | |
|  CEDD | | 土木工程拓展署 Civil Engineering and Development Department | |



- Legend
- Study Area
 - 500m Assessment Area
 - Dust Monitoring Locations
 - Noise Monitoring Location

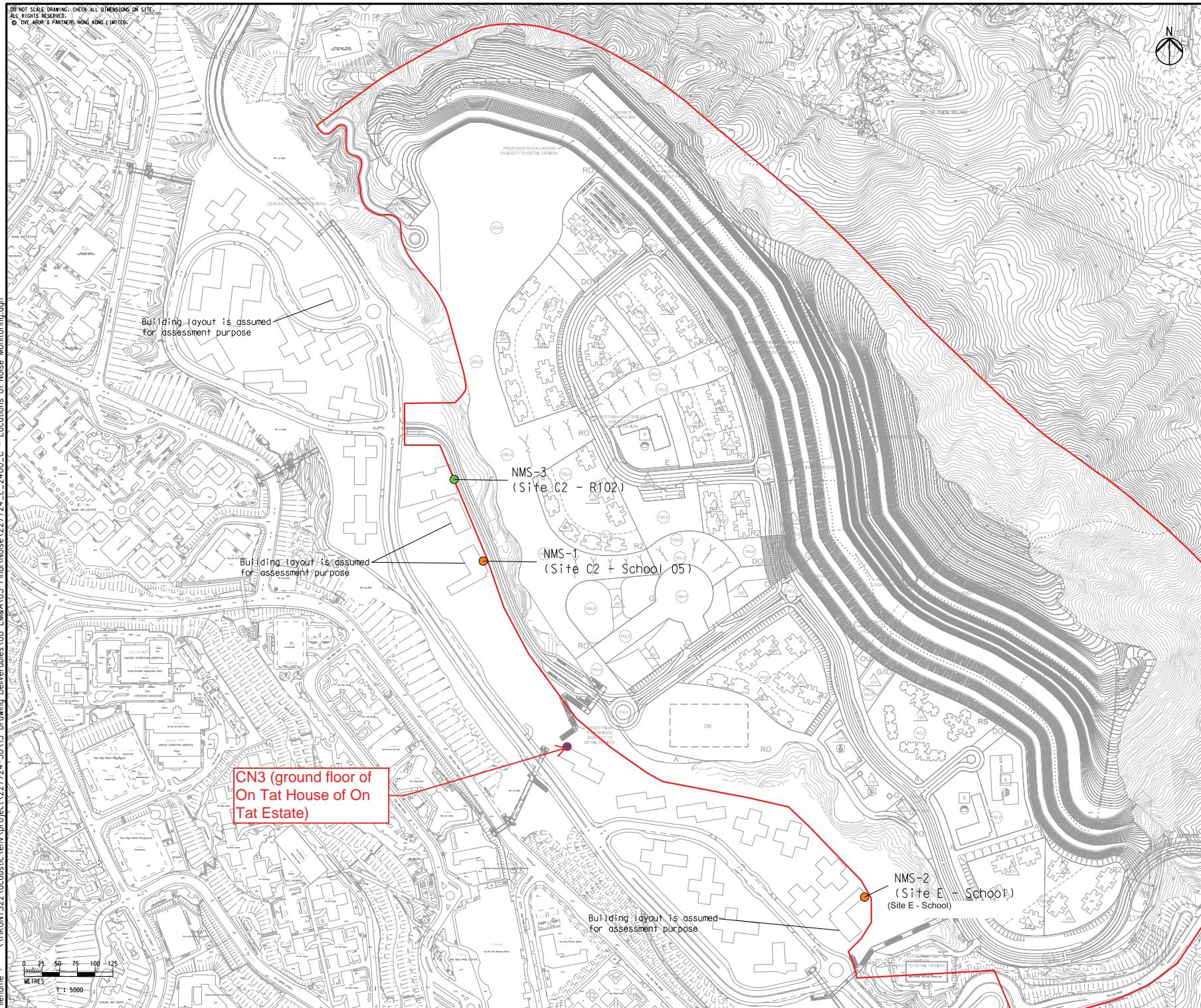
| | | | |
|-----------------|--------------|----|---------|
| B | SECOND ISSUE | GL | 03/14 |
| A | FIRST ISSUE | GL | 10/13 |
| Rev Description | | | By Date |
| Consultant | | | |

Contract No. and Title
Agreement No. CE 18/2012(CE)
Development of
Anderson Road Quarry -
Investigation

Drawing title
Locations of Construction Dust
and Noise Monitoring

COPYRIGHT RESERVED

**Monitoring Locations
for
Contract 3 (NE/2017/03)**



Legend

- Study Area
- Construction Noise Monitoring Location
- Construction and Operational Road Traffic Noise Monitoring Location
- Noise monitoring Location

| | | | |
|---|---------------|---------------|----------------|
| C | THIRD ISSUE | GL | 05/14 |
| B | SECOND ISSUE | GL | 03/14 |
| A | FIRST ISSUE | GL | 10/13 |
| Rev | Description | By | Date |
| Consultant | | | |
| ARUP | | | |
| Contract No. and Title | | | |
| Agreement No. CE 18/2012(CE) | | | |
| Development of Anderson Road Quarry - Investigation | | | |
| Drawing title | | | |
| Locations of Noise Monitoring | | | |
| Drawing no. | | | Rev. |
| 227724/E/2400 | | | C |
| Drawn GL | Date 05/14 | Checked TC | Approved ST |
| Scale 1:5000 | a43 | Status | PRELIMINARY |

ARIUP

Contract No. and Title
Agreement No. CE 18/2012(CE)
Development of
Anderson Road Quarry -
Investigation

Locations of Noise Monitoring

| | | | |
|-----------------|-----------------------|---------------|----------------|
| Drawing no. | | | Rev. |
| 227724/E/2400 | | | C |
| Drawn GL | Date 05/14 | Checked TC | Approved ST |
| Scale 1:5000 | Status PRELIMINARY | | |

Appendix E

Calibration Certificate of Monitoring Equipment and HOKLAS-accreditation Certificate of the Testing Laboratory

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| | | | | | | | |
|---|----------------------------------|----------------------------|----------|---------------|-----------|--------------|-----------------------|
| Location : Tan Shan Village No. 5 - 6 | Date of Calibration: 30-Oct-25 | | | | | | |
| Location ID : AMS1a | Next Calibration Date: 30-Dec-25 | | | | | | |
| Model:TISCH High Volume Air Sampler TE-5170 | Technician: Martin | | | | | | |
| CONDITIONS | | | | | | | |
| Sea Level Pressure (hPa) | 1008.1 | Corrected Pressure (mm Hg) | 756.075 | | | | |
| Temperature (°C) | 30.3 | Temperature (K) | 303 | | | | |
| CALIBRATION ORIFICE | | | | | | | |
| Make-> | TISCH | Qstd Slope -> | 2.10574 | | | | |
| Model-> | TE-5025A | Qstd Intercept -> | -0.03782 | | | | |
| Serial # -> | 1941 | | | | | | |
| CALIBRATION | | | | | | | |
| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m³/min) | I (chart) | IC corrected | LINEAR REGRESSION |
| 18 | 6.3 | 6.3 | 12.6 | 1.685 | 50 | 49.43 | Slope = 40.8503 |
| 13 | 5.4 | 5.4 | 10.8 | 1.561 | 46 | 45.48 | Intercept = -19.2965 |
| 10 | 3.8 | 3.8 | 7.6 | 1.312 | 34 | 33.61 | Corr. coeff. = 0.9971 |
| 7 | 2.7 | 2.7 | 5.4 | 1.109 | 25 | 24.72 | |
| 5 | 1.6 | 1.6 | 3.2 | 0.858 | 17 | 16.81 | |

Calculations :

$Q_{std} = 1/m[\sqrt{H2O(Pa/Pstd)(Tstd/Ta)} - b]$

$IC = I[\sqrt{Pa/Pstd}(Tstd/Ta)]$

Q_{std} = standard flow rate
 IC = corrected chart responses
 I = actual chart response
 m = calibrator Q_{std} slope
 b = calibrator Q_{std} intercept
 Ta = actual temperature during calibration (deg K)
 $Pstd$ = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$1/m((I)[\sqrt{298/Tav}(Pav/760)] - b)$

m = sampler slope
 b = sampler intercept
 I = chart response
 Tav = daily average temperature
 Pav = daily average pressure

FLOW RATE CHART

| Standard Flow Rate (m³/min) | Actual chart response (IC) |
|-----------------------------|----------------------------|
| 0.8 | 17 |
| 1.1 | 25 |
| 1.3 | 34 |
| 1.5 | 45 |
| 1.7 | 50 |

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| | |
|---|----------------------------------|
| Location : Oi Tat House | Date of Calibration: 30-Oct-25 |
| Location ID : AMS 5 | Next Calibration Date: 30-Dec-25 |
| Model:TISCH High Volume Air Sampler TE-5170 | Technician: Martin |

CONDITIONS

| | | | |
|--------------------------|--------|----------------------------|---------|
| Sea Level Pressure (hPa) | 1008.1 | Corrected Pressure (mm Hg) | 756.075 |
| Temperature (°C) | 30.3 | Temperature (K) | 303 |

CALIBRATION ORIFICE

| | |
|------------------|----------------------------|
| Make-> TISCH | Qstd Slope -> 2.10574 |
| Model-> TE-5025A | Qstd Intercept -> -0.03782 |
| Serial # -> 1941 | |

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m ³ /min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|-----------------|-----------------|-------------|-------------------------------|--------------|-----------------|-------------------|-------------|
| | | | | | | | Slope = | Intercept = |
| 18 | 6.3 | 6.3 | 12.6 | 1.685 | 52 | 51.41 | | 40.3357 |
| 13 | 5.2 | 5.2 | 10.4 | 1.532 | 46 | 45.48 | | -16.8262 |
| 10 | 3.8 | 3.8 | 7.6 | 1.312 | 36 | 35.59 | | 0.9976 |
| 7 | 2.6 | 2.6 | 5.2 | 1.089 | 26 | 25.71 | | |
| 5 | 1.5 | 1.5 | 3 | 0.831 | 18 | 17.80 | | |

Calculations :

$$Q_{std} = 1/m[\sqrt{H2O(Pa/Pstd)(Tstd/Ta)} - b]$$

$$IC = I[\sqrt{Pa/Pstd}(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart responses

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\sqrt{298/Tav}(Pav/760)] - b)$$

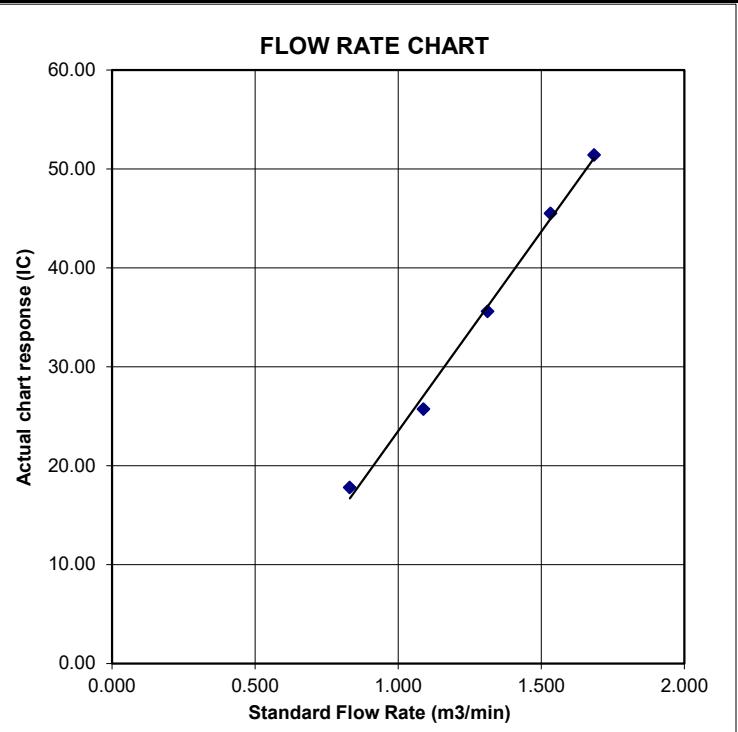
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Hau Tat House
 Location ID : AMS 6
 Model: TISCH High Volume Air Sampler TE-5170

Date of Calibration: 30-Oct-25
 Next Calibration Date: 30-Dec-25
 Technician: Martin

CONDITIONS

Sea Level Pressure (hPa)
 Temperature (°C)

| |
|--------|
| 1008.1 |
| 30.3 |

Corrected Pressure (mm Hg)
 Temperature (K)

| |
|---------|
| 756.075 |
| 303 |

CALIBRATION ORIFICE

Make-> TISCH
 Model-> TE-5025A
 Serial # -> 1941

Qstd Slope -> 2.10574
 Qstd Intercept -> -0.03782

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION |
|-----------|--------------|--------------|----------|---------------|-----------|--------------|-----------------------|
| 18 | 6.4 | 6.4 | 12.8 | 1.698 | 52 | 51.41 | Slope = 40.7175 |
| 13 | 5.2 | 5.2 | 10.4 | 1.532 | 48 | 46.00 | Intercept = -17.3095 |
| 10 | 3.8 | 3.8 | 7.6 | 1.312 | 36 | 35.59 | Corr. coeff. = 0.9991 |
| 7 | 2.7 | 2.7 | 5.4 | 1.109 | 28 | 27.68 | |
| 5 | 1.6 | 1.6 | 3.2 | 0.858 | 18 | 17.80 | |

Calculations :

$$Q_{std} = 1/m[\sqrt{H2O(Pa/Pstd)(Tstd/Ta)} - b]$$

$$IC = I[\sqrt{Pa/Pstd}(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart responses

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\sqrt{298/Tav}(Pav/760)] - b)$$

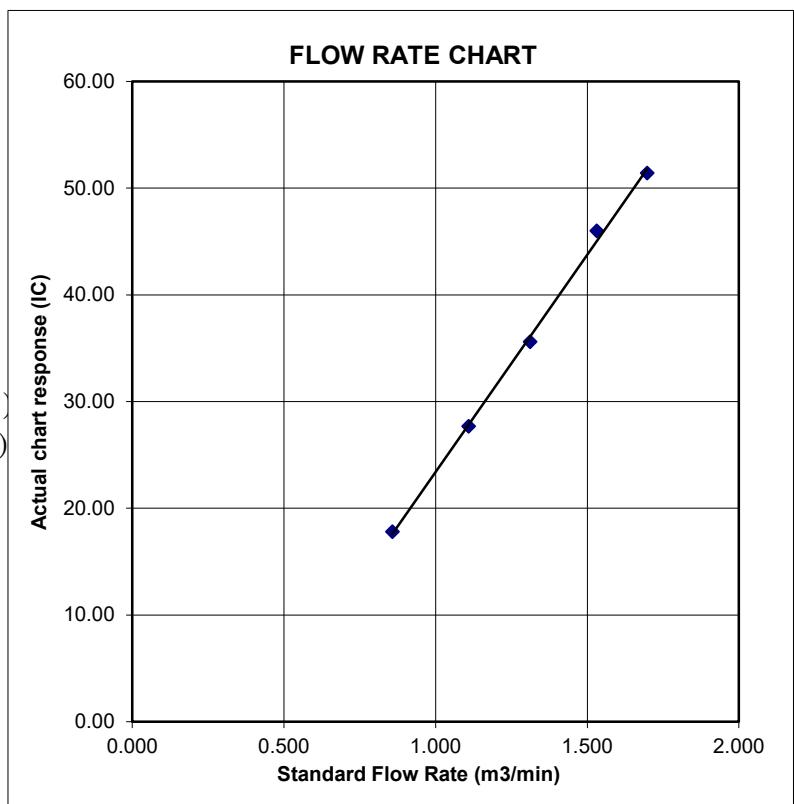
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| Location : Ma Yau Tong Village | Date of Calibration: 30-Oct-25 | | | | | | |
|---|----------------------------------|----------------------------|-------------|-------------------------------|--------------|-----------------|-----------------------|
| Location ID : AMS 7 | Next Calibration Date: 30-Dec-25 | | | | | | |
| Model:TISCH High Volume Air Sampler TE-5170 | Technician: Martin | | | | | | |
| CONDITIONS | | | | | | | |
| Sea Level Pressure (hPa) | 1008.1 | Corrected Pressure (mm Hg) | 756.075 | | | | |
| Temperature (°C) | 30.3 | Temperature (K) | 303 | | | | |
| CALIBRATION ORIFICE | | | | | | | |
| Make-> TISCH | Qstd Slope -> 2.10574 | | | | | | |
| Model-> TE-5025A | Qstd Intercept -> -0.03782 | | | | | | |
| Serial # -> 1941 | | | | | | | |
| CALIBRATION | | | | | | | |
| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m ³ /min) | I (chart) | IC corrected | LINEAR REGRESSION |
| 18 | 6.5 | 6.5 | 13 | 1.711 | 52 | 51.41 | Slope = 40.1735 |
| 13 | 5.5 | 5.5 | 11 | 1.575 | 48 | 47.46 | Intercept = -16.6234 |
| 10 | 3.7 | 3.7 | 7.4 | 1.295 | 36 | 35.59 | Corr. coeff. = 0.9992 |
| 7 | 2.7 | 2.7 | 5.4 | 1.109 | 28 | 27.68 | |
| 5 | 1.6 | 1.6 | 3.2 | 0.858 | 18 | 17.80 | |

Calculations :

$Q_{std} = 1/m[\sqrt{H2O(Pa/Pstd)(Tstd/Ta)} - b]$

$IC = I[\sqrt{Pa/Pstd}(Tstd/Ta)]$

Q_{std} = standard flow rate
 IC = corrected chart responses
 I = actual chart response
 m = calibrator Q_{std} slope
 b = calibrator Q_{std} intercept
 Ta = actual temperature during calibration (deg K)
 $Pstd$ = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$1/m((I)[\sqrt{298/Tav}(Pav/760)] - b)$

m = sampler slope
 b = sampler intercept
 I = chart response
 Tav = daily average temperature
 Pav = daily average pressure

FLOW RATE CHART

| Standard Flow Rate (m³/min) | Actual chart response (IC) |
|-----------------------------|----------------------------|
| 0.9 | 18 |
| 1.1 | 27 |
| 1.3 | 36 |
| 1.6 | 51 |



RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2512467 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | --- | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 21-MAR-2025 | |
| | | DATE OF ISSUE | : | 1-APR-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Richard Fung
Signatories

Position

Richard Fung

Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2512467
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : ---

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2512467-001 | S/N: 456658 | AIR | 21-Mar-2025 | S/N: 456658 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-3B
Serial No. 456658
Equipment Ref: EQ115

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: AUES office (calibration room)
Equipment Ref: HVS 018
Last Calibration Date: 12 February 2025

Equipment Verification Results:

Verification Date: 11 March 2025

| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|-----------|-----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 11-Mar-25 | 2hr00mins | 11:00 ~ 13:00 | 22.0 | 1016.6 | 59.7 | 3221 | 26.8 |
| 11-Mar-25 | 2hr09mins | 13:07 ~ 13:16 | 22.0 | 1016.6 | 59.0 | 3613 | 28.0 |
| 11-Mar-25 | 2hr00mins | 15:17 ~ 17:17 | 22.0 | 1018.8 | 67.7 | 4132 | 34.4 |

Sensitivity Adjustment Scale Setting (Before Calibration) 702 (CPM)

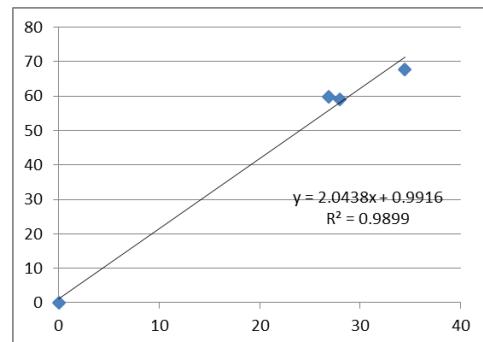
Sensitivity Adjustment Scale Setting (After Calibration) 705 (CPM)

Linear Regression of Y or X

Slope (K-factor): 2.0438 ($\mu\text{g}/\text{m}^3$)/CPM

Correlation Coefficient (R) 0.9949

Date of Issue 18 March 2025



Remarks:

- Strong Correlation ($R > 0.8$)
- Factor 2.0438 ($\mu\text{g}/\text{m}^3$)/CPM should be apply for TSP monitoring

*If $R < 0.5$, repair or re-verification is required for the equipment

Operator : Jeff Ip Signature :  Date : 18 March 2025

QC Reviewer : Ben Tam Signature :  Date : 18 March 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| | | |
|---------------|---|----------------------------------|
| Location : | Gold King Industrial Building, Kwai Chung | Date of Calibration: 12-Feb-25 |
| Location ID : | Calibration Room - TISCH Higher Volume Sampler (Model TE-5170) S/N:1260 | Next Calibration Date: 12-May-25 |

CONDITIONS

| | | | |
|--------------------------|--------|----------------------------|-------|
| Sea Level Pressure (hPa) | 1017.2 | Corrected Pressure (mm Hg) | 762.9 |
| Temperature (°C) | 18.8 | Temperature (K) | 292 |

CALIBRATION ORIFICE

| | | | |
|--------------------|-----------|-------------------|-----------|
| Make-> | TISCH | Qstd Slope -> | 2.09671 |
| Model-> | 5025A | Qstd Intercept -> | -0.01852 |
| Calibration Date-> | 16-Dec-24 | Expiry Date-> | 16-Dec-25 |

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|-----------------|-----------------|-------------|------------------|--------------|-----------------|-------------------|---------|
| | | | | | | | Slope = | 35.3445 |
| 18 | 5.6 | 5.6 | 11.2 | 1.625 | 55 | 55.69 | Intercept = | -2.1779 |
| 13 | 4.5 | 4.5 | 9.0 | 1.458 | 48 | 48.60 | Corr. coeff. = | 0.9989 |
| 10 | 3.4 | 3.4 | 6.8 | 1.268 | 42 | 42.52 | | |
| 8 | 2.3 | 2.3 | 4.6 | 1.045 | 35 | 35.44 | | |
| 5 | 1.2 | 1.2 | 2.4 | 0.757 | 24 | 24.30 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

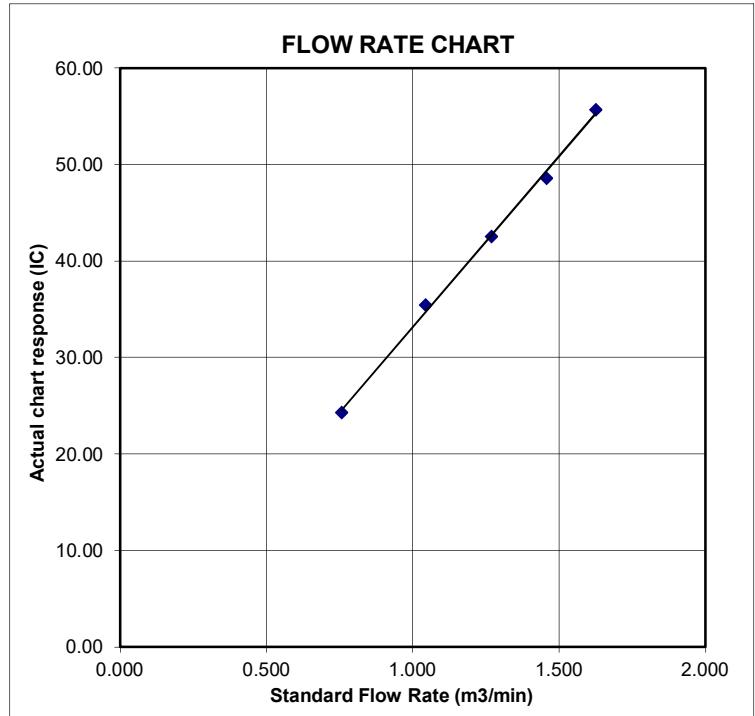
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2512468 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | --- | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 21-MAR-2025 | |
| | | DATE OF ISSUE | : | 1-APR-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
 - Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
 - Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.
 - Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.
-

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Richard Fung *Position*

Richard Fung Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2512468
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : ---

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2512468-001 | S/N: 456659 | AIR | 21-Mar-2025 | S/N: 456659 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-3B
Serial No. 456659
Equipment Ref: EQ116

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: AUES office (calibration room)
Equipment Ref: HVS 018
Last Calibration Date: 12 February 2025

Equipment Verification Results:

Verification Date: 11 March 2025

| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|-----------|-----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 11-Mar-25 | 2hr00mins | 11:00 ~ 13:00 | 22.0 | 1016.6 | 59.7 | 3177 | 26.5 |
| 11-Mar-25 | 2hr09mins | 13:07 ~ 13:16 | 22.0 | 1016.6 | 59.0 | 3987 | 30.9 |
| 11-Mar-25 | 2hr00mins | 15:17 ~ 17:17 | 22.0 | 1018.8 | 67.7 | 4121 | 34.3 |

Sensitivity Adjustment Scale Setting (Before Calibration) 726 (CPM)

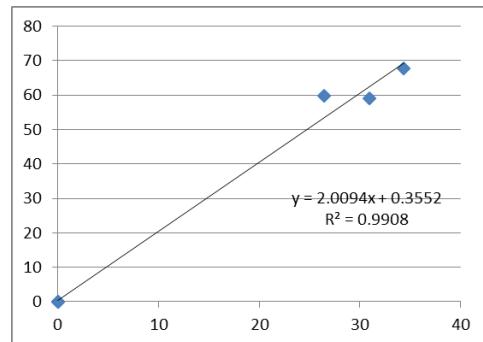
Sensitivity Adjustment Scale Setting (After Calibration) 727 (CPM)

Linear Regression of Y or X

Slope (K-factor): 2.0094 ($\mu\text{g}/\text{m}^3$)/CPM

Correlation Coefficient (R) 0.9953

Date of Issue 18 March 2025



Remarks:

- Strong Correlation ($R > 0.8$)
- Factor 2.0094 ($\mu\text{g}/\text{m}^3$)/CPM should be apply for TSP monitoring

*If $R < 0.5$, repair or re-verification is required for the equipment

Operator : Jeff Ip Signature :  Date : 18 March 2025

QC Reviewer : Ben Tam Signature :  Date : 18 March 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| | | |
|---------------|---|----------------------------------|
| Location : | Gold King Industrial Building, Kwai Chung | Date of Calibration: 12-Feb-25 |
| Location ID : | Calibration Room - TISCH Higher Volume Sampler (Model TE-5170) S/N:1260 | Next Calibration Date: 12-May-25 |

CONDITIONS

| | | | |
|--------------------------|--------|----------------------------|-------|
| Sea Level Pressure (hPa) | 1017.2 | Corrected Pressure (mm Hg) | 762.9 |
| Temperature (°C) | 18.8 | Temperature (K) | 292 |

CALIBRATION ORIFICE

| | | | |
|--------------------|-----------|-------------------|-----------|
| Make-> | TISCH | Qstd Slope -> | 2.09671 |
| Model-> | 5025A | Qstd Intercept -> | -0.01852 |
| Calibration Date-> | 16-Dec-24 | Expiry Date-> | 16-Dec-25 |

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|-----------------|-----------------|-------------|------------------|--------------|-----------------|-------------------|---------|
| | | | | | | | Slope = | 35.3445 |
| 18 | 5.6 | 5.6 | 11.2 | 1.625 | 55 | 55.69 | Intercept = | -2.1779 |
| 13 | 4.5 | 4.5 | 9.0 | 1.458 | 48 | 48.60 | Corr. coeff. = | 0.9989 |
| 10 | 3.4 | 3.4 | 6.8 | 1.268 | 42 | 42.52 | | |
| 8 | 2.3 | 2.3 | 4.6 | 1.045 | 35 | 35.44 | | |
| 5 | 1.2 | 1.2 | 2.4 | 0.757 | 24 | 24.30 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

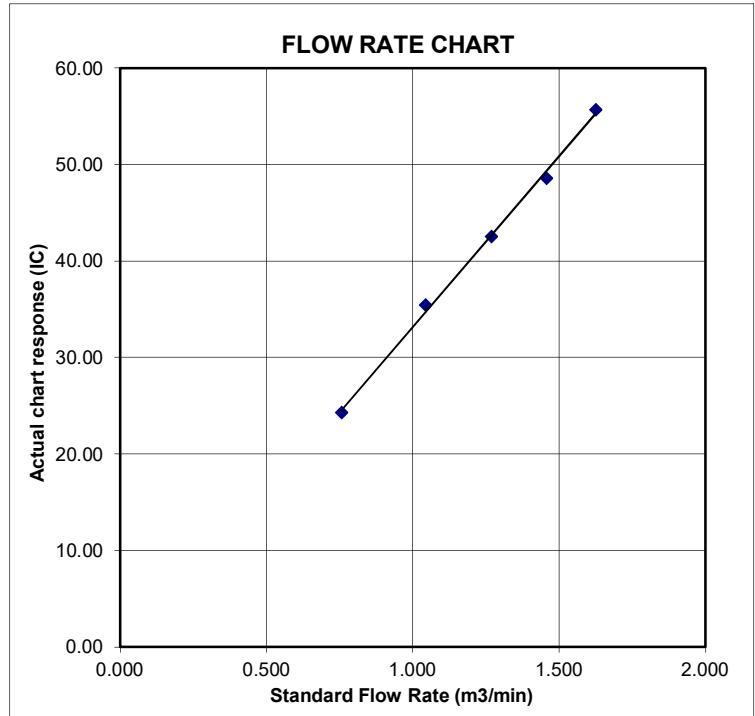
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2512469 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | --- | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 21-MAR-2025 | |
| | | DATE OF ISSUE | : | 1-APR-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.
- Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Richard Fung
Signatories

Position

Richard Fung

Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2512469
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : ---

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2512469-001 | S/N: 456660 | AIR | 21-Mar-2025 | S/N: 456660 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-3B
Serial No. 456660
Equipment Ref: EQ117

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: AUES office (calibration room)
Equipment Ref: HVS 018
Last Calibration Date: 12 February 2025

Equipment Verification Results:

Verification Date: 11 March 2025

| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|-----------|-----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 11-Mar-25 | 2hr00mins | 11:00 ~ 13:00 | 22.0 | 1016.6 | 59.7 | 3225 | 26.9 |
| 11-Mar-25 | 2hr09mins | 13:07 ~ 13:16 | 22.0 | 1016.6 | 59.0 | 3897 | 30.2 |
| 11-Mar-25 | 2hr00mins | 15:17 ~ 17:17 | 22.0 | 1018.8 | 67.7 | 3996 | 33.3 |

Sensitivity Adjustment Scale Setting (Before Calibration) 612 (CPM)

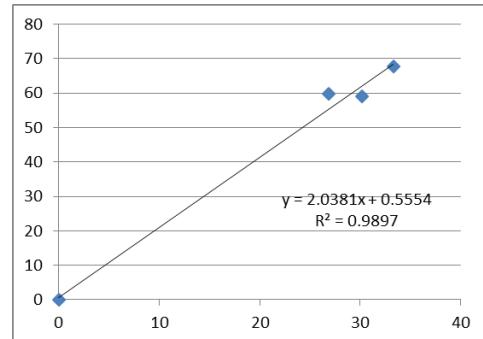
Sensitivity Adjustment Scale Setting (After Calibration) 609 (CPM)

Linear Regression of Y or X

Slope (K-factor): 2.0381 ($\mu\text{g}/\text{m}^3$)/CPM

Correlation Coefficient (R) 0.9948

Date of Issue 18 March 2025



Remarks:

- Strong Correlation (R>0.8)
- Factor 2.0381 ($\mu\text{g}/\text{m}^3$)/CPM should be apply for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Jeff Ip Signature :  Date : 18 March 2025

QC Reviewer : Ben Tam Signature :  Date : 18 March 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| | | |
|---------------|---|----------------------------------|
| Location : | Gold King Industrial Building, Kwai Chung | Date of Calibration: 12-Feb-25 |
| Location ID : | Calibration Room - TISCH Higher Volume Sampler (Model TE-5170) S/N:1260 | Next Calibration Date: 12-May-25 |

CONDITIONS

| | | | |
|--------------------------|--------|----------------------------|-------|
| Sea Level Pressure (hPa) | 1017.2 | Corrected Pressure (mm Hg) | 762.9 |
| Temperature (°C) | 18.8 | Temperature (K) | 292 |

CALIBRATION ORIFICE

| | | | |
|--------------------|-----------|-------------------|-----------|
| Make-> | TISCH | Qstd Slope -> | 2.09671 |
| Model-> | 5025A | Qstd Intercept -> | -0.01852 |
| Calibration Date-> | 16-Dec-24 | Expiry Date-> | 16-Dec-25 |

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|-----------------|-----------------|-------------|------------------|--------------|-----------------|-------------------|---------|
| | | | | | | | Slope = | 35.3445 |
| 18 | 5.6 | 5.6 | 11.2 | 1.625 | 55 | 55.69 | Intercept = | -2.1779 |
| 13 | 4.5 | 4.5 | 9.0 | 1.458 | 48 | 48.60 | Corr. coeff. = | 0.9989 |
| 10 | 3.4 | 3.4 | 6.8 | 1.268 | 42 | 42.52 | | |
| 8 | 2.3 | 2.3 | 4.6 | 1.045 | 35 | 35.44 | | |
| 5 | 1.2 | 1.2 | 2.4 | 0.757 | 24 | 24.30 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

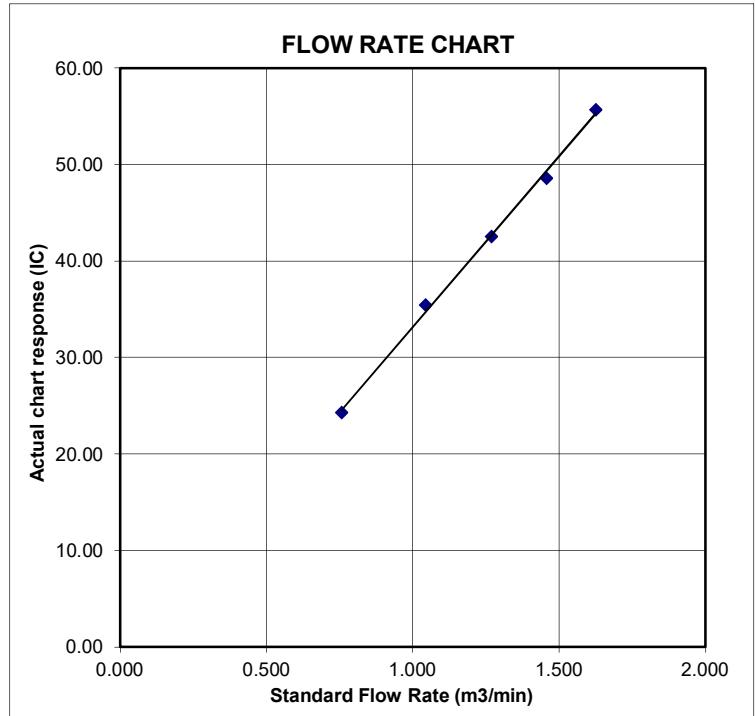
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2540548 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | Not Specified | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 17-SEP-2025 | |
| | | DATE OF ISSUE | : | 22-SEP-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.
- No sample is received in this Work Order. The report presents non-laboratory testing data only.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories

Position

A handwritten signature in black ink, appearing to read 'Richard Fung'.

Richard Fung

Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2540548
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : Not Specified

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2540548-001 | S/N: 467389 | AIR | 17-Sep-2025 | S/N: 467389 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-5R
Serial No. 467389
Equipment Ref: EQ125

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: Ha Pak Nai
Equipment Ref: HVS 023
Last Calibration Date: 16 August 2025

Equipment Verification Results:

Verification Date: 3 September 2025

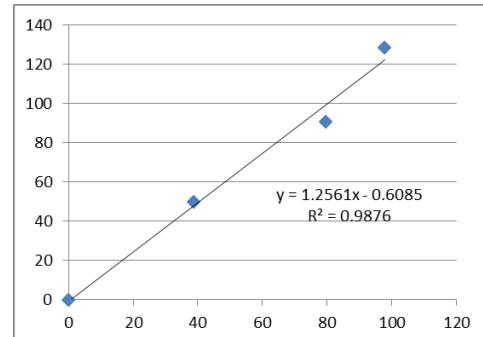
| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|----------|----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 3-Sep-25 | 1hr00min | 11:18 ~ 12:18 | 30.5 | 1008.2 | 90.9 | 4773 | 79.6 |
| 3-Sep-25 | 1hr00min | 12:23 ~ 13:23 | 30.5 | 1008.2 | 49.7 | 2326 | 38.8 |
| 3-Sep-25 | 1hr00min | 13:28 ~ 14:28 | 30.5 | 1008.2 | 128.5 | 5868 | 97.8 |

Sensitivity Adjustment Scale Setting (Before Calibration) 704 (CPM)

Sensitivity Adjustment Scale Setting (After Calibration) 705 (CPM)

Linear Regression of Y or X

Slope (K-factor): 1.2561 ($\mu\text{g}/\text{m}^3$)/CPM
Correlation Coefficient (R) 0.9938
Date of Issue 10 September 2025



Remarks:

- Strong Correlation ($R>0.8$)
- Factor 1.2561 ($\mu\text{g}/\text{m}^3$)/CPM should be apply for TSP monitoring

*If $R<0.5$, repair or re-verification is required for the equipment

Operator : Gary Ng Signature :  Date : 10 September 2025

QC Reviewer : Ben Tam Signature :  Date : 10 September 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Ha Pak Nai
 Location ID : AM(D)3
 Model: TISCH High Volume Air Sampler TE-5170

Date of Calibration: 16-Aug-25
 Next Calibration Date: 16-Oct-25

CONDITIONS

Sea Level Pressure (hPa) 1008.5
 Temperature (°C) 29.3

Corrected Pressure (mm Hg) 756.375
 Temperature (K) 302

CALIBRATION ORIFICE

Make-> TISCH
 Model-> 5025A
 Calibration Date-> 16-Dec-24

Qstd Slope -> 2.09671
 Qstd Intercept -> -0.01852
 Expiry Date-> 16-Dec-25

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|--------------|--------------|----------|---------------|-----------|--------------|-------------------|---------|
| | | | | | | | Slope = | 26.8673 |
| 18 | 6.4 | 6.4 | 12.8 | 1.699 | 54 | 53.10 | Intercept = | 7.0086 |
| 13 | 5.2 | 5.2 | 10.4 | 1.532 | 49 | 48.19 | Corr. coeff. = | 0.9983 |
| 10 | 3.8 | 3.8 | 7.6 | 1.311 | 42 | 41.30 | | |
| 8 | 2.6 | 2.6 | 5.2 | 1.086 | 37 | 36.39 | | |
| 5 | 1.5 | 1.5 | 3.0 | 0.827 | 30 | 29.50 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

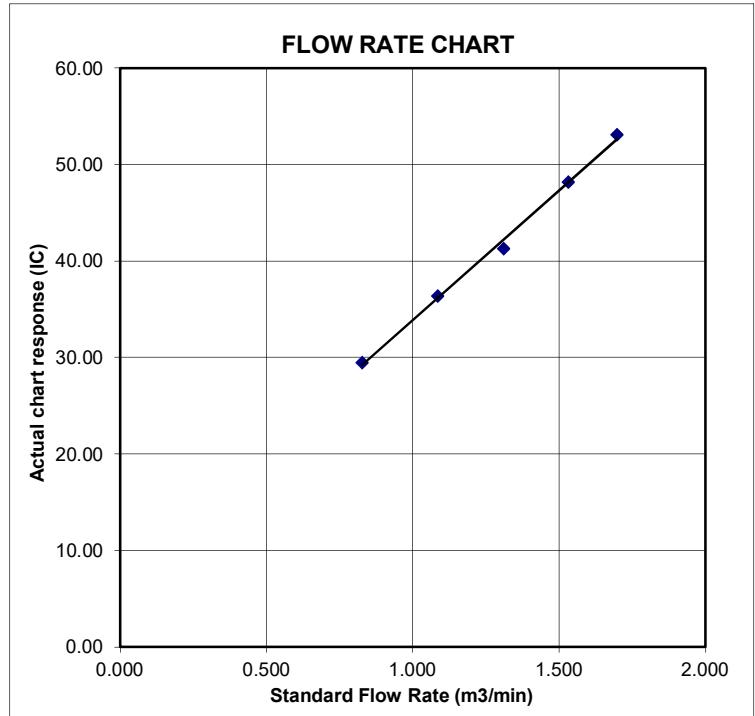
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2540549 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | Not Specified | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 17-SEP-2025 | |
| | | DATE OF ISSUE | : | 22-SEP-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- No sample is received in this Work Order. The report presents non-laboratory testing data only.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories

Position

A handwritten signature of Richard Fung.

Richard Fung

Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2540549
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : Not Specified

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2540549-001 | S/N: 467390 | AIR | 17-Sep-2025 | S/N: 467390 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-5R
Serial No. 467390
Equipment Ref: EQ126

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: Ha Pak Nai
Equipment Ref: HVS 023
Last Calibration Date: 16 August 2025

Equipment Verification Results:

Verification Date: 3 September 2025

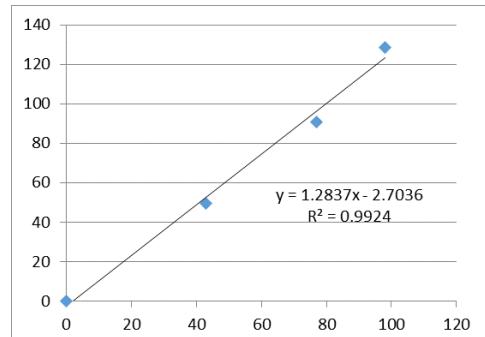
| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|----------|----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 3-Sep-25 | 1hr00min | 11:18 ~ 12:18 | 30.5 | 1008.2 | 90.9 | 4612 | 76.9 |
| 3-Sep-25 | 1hr00min | 12:23 ~ 13:23 | 30.5 | 1008.2 | 49.7 | 2582 | 43.0 |
| 3-Sep-25 | 1hr00min | 13:28 ~ 14:28 | 30.5 | 1008.2 | 128.5 | 5886 | 98.1 |

Sensitivity Adjustment Scale Setting (Before Calibration) 613 (CPM)

Sensitivity Adjustment Scale Setting (After Calibration) 612 (CPM)

Linear Regression of Y or X

Slope (K-factor): 1.2837 ($\mu\text{g}/\text{m}^3$)/CPM
Correlation Coefficient (R) 0.9962
Date of Issue 10 September 2025



Remarks:

- Strong Correlation ($R > 0.8$)
- Factor 1.2837 ($\mu\text{g}/\text{m}^3$)/CPM should be apply for TSP monitoring

*If $R < 0.5$, repair or re-verification is required for the equipment

Operator : Gary Ng Signature :  Date : 10 September 2025

QC Reviewer : Ben Tam Signature :  Date : 10 September 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Ha Pak Nai
 Location ID : AM(D)3
 Model: TISCH High Volume Air Sampler TE-5170

Date of Calibration: 16-Aug-25
 Next Calibration Date: 16-Oct-25

CONDITIONS

Sea Level Pressure (hPa) 1008.5
 Temperature (°C) 29.3

Corrected Pressure (mm Hg) 756.375
 Temperature (K) 302

CALIBRATION ORIFICE

Make-> TISCH
 Model-> 5025A
 Calibration Date-> 16-Dec-24

Qstd Slope -> 2.09671
 Qstd Intercept -> -0.01852
 Expiry Date-> 16-Dec-25

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|--------------|--------------|----------|---------------|-----------|--------------|-------------------|-------------|
| | | | | | | | Slope = | Intercept = |
| 18 | 6.4 | 6.4 | 12.8 | 1.699 | 54 | 53.10 | | 26.8673 |
| 13 | 5.2 | 5.2 | 10.4 | 1.532 | 49 | 48.19 | | 7.0086 |
| 10 | 3.8 | 3.8 | 7.6 | 1.311 | 42 | 41.30 | | 0.9983 |
| 8 | 2.6 | 2.6 | 5.2 | 1.086 | 37 | 36.39 | | |
| 5 | 1.5 | 1.5 | 3.0 | 0.827 | 30 | 29.50 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

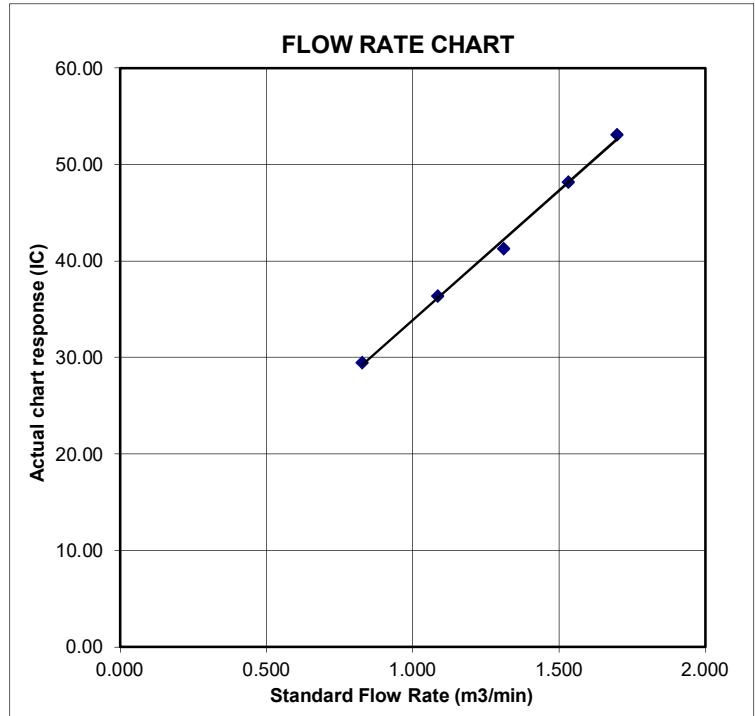
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2540550 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | Not Specified | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 17-SEP-2025 | |
| | | DATE OF ISSUE | : | 22-SEP-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.
- No sample is received in this Work Order. The report presents non-laboratory testing data only.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Richard Fung *Position*

Richard Fung Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2540550
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : Not Specified

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2540550-001 | S/N: 467391 | AIR | 17-Sep-2025 | S/N: 467391 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-5R
Serial No. 467391
Equipment Ref: EQ127

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: Ha Pak Nai
Equipment Ref: HVS 023
Last Calibration Date: 16 August 2025

Equipment Verification Results:

Verification Date: 3 September 2025

| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|----------|----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 3-Sep-25 | 1hr00min | 11:18 ~ 12:18 | 30.5 | 1008.2 | 90.9 | 4540 | 75.7 |
| 3-Sep-25 | 1hr00min | 12:23 ~ 13:23 | 30.5 | 1008.2 | 49.7 | 2230 | 37.2 |
| 3-Sep-25 | 1hr00min | 13:28 ~ 14:28 | 30.5 | 1008.2 | 128.5 | 5990 | 99.8 |

Sensitivity Adjustment Scale Setting (Before Calibration) 665 (CPM)

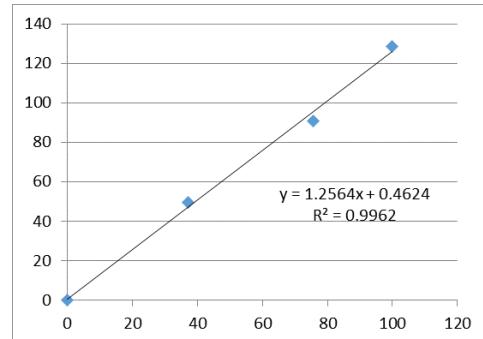
Sensitivity Adjustment Scale Setting (After Calibration) 665 (CPM)

Linear Regression of Y or X

Slope (K-factor): 1.2564 ($\mu\text{g}/\text{m}^3$)/CPM

Correlation Coefficient (R) 0.9981

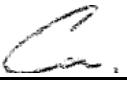
Date of Issue 10 September 2025



Remarks:

- Strong Correlation ($R > 0.8$)
- Factor 1.2564 ($\mu\text{g}/\text{m}^3$)/CPM should be apply for TSP monitoring

*If $R < 0.5$, repair or re-verification is required for the equipment

Operator : Gary Ng Signature :  Date : 10 September 2025

QC Reviewer : Ben Tam Signature :  Date : 10 September 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Ha Pak Nai
 Location ID : AM(D)3
 Model: TISCH High Volume Air Sampler TE-5170

Date of Calibration: 16-Aug-25
 Next Calibration Date: 16-Oct-25

CONDITIONS

Sea Level Pressure (hPa) 1008.5
 Temperature (°C) 29.3

Corrected Pressure (mm Hg) 756.375
 Temperature (K) 302

CALIBRATION ORIFICE

Make-> TISCH
 Model-> 5025A
 Calibration Date-> 16-Dec-24

Qstd Slope -> 2.09671
 Qstd Intercept -> -0.01852
 Expiry Date-> 16-Dec-25

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|--------------|--------------|----------|---------------|-----------|--------------|-------------------|-------------|
| | | | | | | | Slope = | Intercept = |
| 18 | 6.4 | 6.4 | 12.8 | 1.699 | 54 | 53.10 | | 26.8673 |
| 13 | 5.2 | 5.2 | 10.4 | 1.532 | 49 | 48.19 | | 7.0086 |
| 10 | 3.8 | 3.8 | 7.6 | 1.311 | 42 | 41.30 | | 0.9983 |
| 8 | 2.6 | 2.6 | 5.2 | 1.086 | 37 | 36.39 | | |
| 5 | 1.5 | 1.5 | 3.0 | 0.827 | 30 | 29.50 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

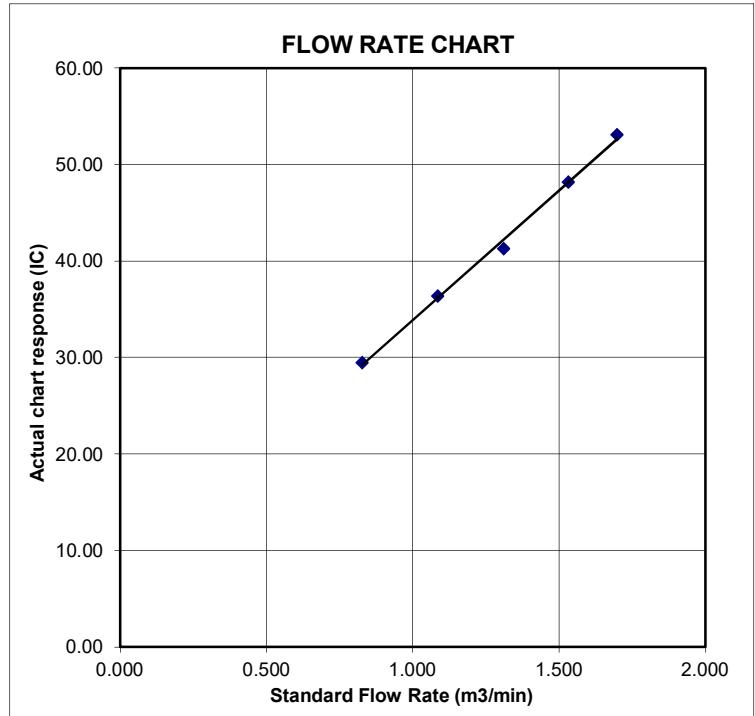
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



SUB-CONTRACTING REPORT

| | | | | | |
|---------|---|---|------------|-------------|-----------|
| CONTACT | : | MR BEN TAM | WORK ORDER | : | HK2540542 |
| CLIENT | : | ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING | | | |
| ADDRESS | : | RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T. | | | |
| PROJECT | : | Not Specified | | | |
| | | SUB-BATCH | : | 1 | |
| | | DATE RECEIVED | : | 17-SEP-2025 | |
| | | DATE OF ISSUE | : | 22-SEP-2025 | |
| | | NO. OF SAMPLES | : | 1 | |
| | | CLIENT ORDER | : | --- | |

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.
- No sample is received in this Work Order. The report presents non-laboratory testing data only.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories

Position

A handwritten signature of Richard Fung.

Richard Fung

Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com



WORK ORDER : HK2540542
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : Not Specified

| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. |
|---------------|--------------------|-------------|-------------|-------------------------|
| HK2540542-001 | S/N: 467392 | AIR | 17-Sep-2025 | S/N: 467392 |

----- END OF REPORT -----

Equipment Verification Report (TSP)

Equipment Calibrated:

Type: Laser Dust monitor
Manufacturer: Sibata LD-5R
Serial No. 467392
Equipment Ref: EQ128

Standard Equipment:

Standard Equipment: Higher Volume Sampler (TSP)
Location & Location ID: Ha Pak Nai
Equipment Ref: HVS 023
Last Calibration Date: 16 August 2025

Equipment Verification Results:

Verification Date: 3 September 2025

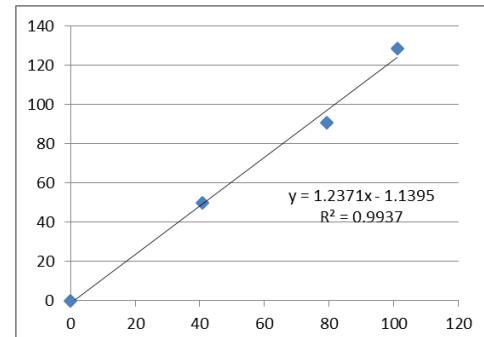
| Date | Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|----------|----------|---------------|--------------|---------------------|---|------------------------------------|--------------------------------|
| 3-Sep-25 | 1hr00min | 11:18 ~ 12:18 | 30.5 | 1008.2 | 90.9 | 4752 | 79.2 |
| 3-Sep-25 | 1hr00min | 12:23 ~ 13:23 | 30.5 | 1008.2 | 49.7 | 2453 | 40.9 |
| 3-Sep-25 | 1hr00min | 13:28 ~ 14:28 | 30.5 | 1008.2 | 128.5 | 6065 | 101.1 |

Sensitivity Adjustment Scale Setting (Before Calibration) 715 (CPM)

Sensitivity Adjustment Scale Setting (After Calibration) 714 (CPM)

Linear Regression of Y or X

Slope (K-factor): 1.2371(ug/m³)/CPM
Correlation Coefficient (R) 0.9968
Date of Issue 10 September 2025



Remarks:

- Strong Correlation (R>0.8)
- Factor 1.2371(ug/m³)/CPM should be apply for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Gary Ng Signature :  Date : 10 September 2025

QC Reviewer : Ben Tam Signature :  Date : 10 September 2025

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Ha Pak Nai
 Location ID : AM(D)3
 Model: TISCH High Volume Air Sampler TE-5170

Date of Calibration: 16-Aug-25
 Next Calibration Date: 16-Oct-25

CONDITIONS

Sea Level Pressure (hPa) 1008.5
 Temperature (°C) 29.3

Corrected Pressure (mm Hg) 756.375
 Temperature (K) 302

CALIBRATION ORIFICE

Make-> TISCH
 Model-> 5025A
 Calibration Date-> 16-Dec-24

Qstd Slope -> 2.09671
 Qstd Intercept -> -0.01852
 Expiry Date-> 16-Dec-25

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION | |
|-----------|-----------------|-----------------|-------------|------------------|--------------|-----------------|-------------------|---------|
| | | | | | | | Slope = | 26.8673 |
| 18 | 6.4 | 6.4 | 12.8 | 1.699 | 54 | 53.10 | Intercept = | 7.0086 |
| 13 | 5.2 | 5.2 | 10.4 | 1.532 | 49 | 48.19 | Corr. coeff. = | 0.9983 |
| 10 | 3.8 | 3.8 | 7.6 | 1.311 | 42 | 41.30 | | |
| 8 | 2.6 | 2.6 | 5.2 | 1.086 | 37 | 36.39 | | |
| 5 | 1.5 | 1.5 | 3.0 | 0.827 | 30 | 29.50 | | |

Calculations :

$$Q_{std} = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$$

$$IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$$

Qstd = standard flow rate

IC = corrected chart response

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$$

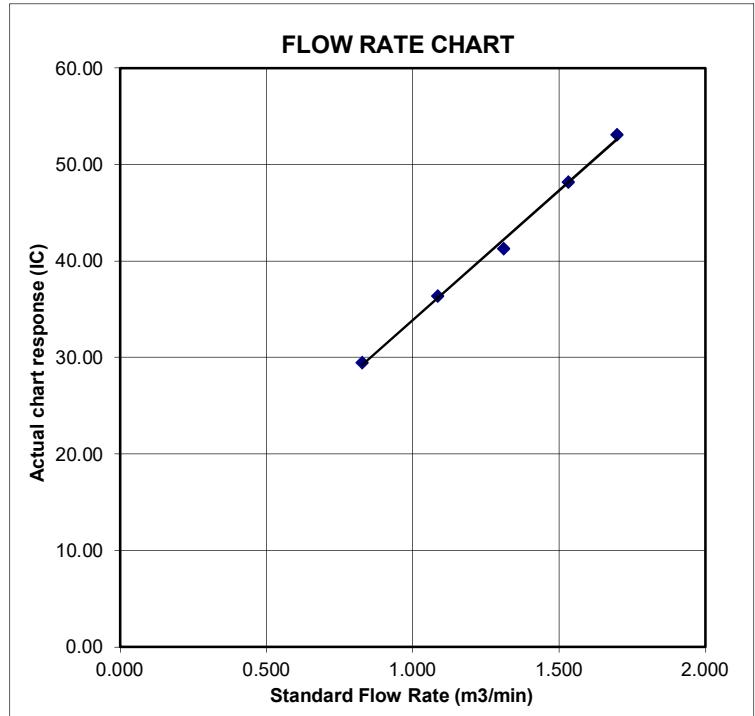
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure





RECALIBRATION

DUE DATE:

December 16, 2025

Certificate of Calibration

Calibration Certification Information

| | | | | | | |
|----------------------|-------------------|-----------------------------|--------|-----|-------|-------|
| Cal. Date: | December 16, 2024 | Rootsmeter S/N: | 438320 | Ta: | 293 | °K |
| Operator: | Jim Tisch | | | Pa: | 749.0 | mm Hg |
| Calibration Model #: | TE-5025A | Calibrator S/N: 4064 | | | | |

| Run | Vol. Init (m ³) | Vol. Final (m ³) | ΔVol. (m ³) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H ₂ O) |
|-----|--------------------------------|---------------------------------|----------------------------|----------------|---------------|-----------------------------|
| 1 | 1 | 2 | 1 | 1.4600 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0300 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9220 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8770 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m ³) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|---------------------------|------------------|---|--------|----------------|--|
| 0.9981 | 0.6836 | 1.4159 | 0.9957 | 0.6820 | 0.8845 |
| 0.9938 | 0.9649 | 2.0024 | 0.9915 | 0.9626 | 1.2509 |
| 0.9917 | 1.0756 | 2.2388 | 0.9893 | 1.0730 | 1.3985 |
| 0.9906 | 1.1296 | 2.3480 | 0.9883 | 1.1269 | 1.4668 |
| 0.9853 | 1.3590 | 2.8318 | 0.9829 | 1.3557 | 1.7690 |
| QSTD | m= | 2.09671 | QA | m= | 1.31292 |
| | b= | -0.01852 | | b= | -0.01157 |
| | r= | 0.99999 | | r= | 0.99999 |

Calculations

$$Vstd = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$$

$$Va = \Delta Vol \left(\frac{(Pa - \Delta P)}{Pa} \right)$$

$$Qstd = Vstd / \Delta Time$$

$$Qa = Va / \Delta Time$$

For subsequent flow rate calculations:

$$Qstd = 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$$

$$Qa = 1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$$

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

 ΔH: calibrator manometer reading (in H₂O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



Certificate of Calibration 校正證書

Certificate No. : C252625
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引[編號 : IC25-0908) Date of Receipt / 收件日期 : 7 November 2025

Description / 儀器名稱 : Integrating Sound Level Meter (EQ009)
Manufacturer / 製造商 : Brüel & Kjær
Model No. / 型號 : 2238
Serial No. / 編號 : 2285722
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 3)°C
Line Voltage / 電壓 : ---

Relative Humidity / 相對濕度 : (50 ± 25)%

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 18 November 2025

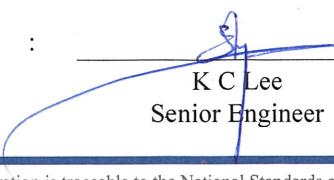
TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Thurlby Thandar Instruments Ltd., UK

Tested By : 
測試
C K Lo
Project Engineer

Certified By : 
核證
K C Lee
Senior Engineer

Date of Issue : 19 November 2025
簽發日期

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



Certificate of Calibration

校正證書

Certificate No. : C252625
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 1 hour, and switched on to warm up for over 10 minutes before the commencement of the test.
2. Self-calibration using laboratory acoustic calibrator was performed before the test from 6.1.1.2 to 6.4.
3. The results presented are the mean of 3 measurements at each calibration point.
4. Test equipment :

| <u>Equipment ID</u> | <u>Description</u> | <u>Certificate No.</u> |
|---------------------|---------------------------------------|------------------------|
| CL458 | Dual Function / Arb / Pulse Generator | 3001978 |
| CL461 | Sound Calibrator | CDK2502138 |

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

6.1.1.1 Before Self-calibration

| UUT Setting | | | | Applied Value | | UUT |
|-------------|------------|---------------------|----------------|---------------|-------------|--------------|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) |
| 52 - 132 | $L_{A,FP}$ | A | F | 94.00 | 1 | 92.4 |

6.1.1.2 After Self-calibration

| UUT Setting | | | | Applied Value | | UUT | IEC 60651 |
|-------------|------------|---------------------|----------------|---------------|-------------|--------------|-------------------|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) | Type 1 Limit (dB) |
| 54 - 134 | $L_{A,FP}$ | A | F | 94.00 | 1 | 94.0 | ± 0.7 |

6.1.2 Linearity

| UUT Setting | | | | Applied Value | | UUT |
|-------------|------------|---------------------|----------------|---------------|-------------|--------------|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) |
| 54 - 134 | $L_{A,FP}$ | A | F | 94.00 | 1 | 94.0 (Ref.) |
| | | | | 104.00 | | 104.0 |
| | | | | 114.00 | | 113.9 |
| | | | | | | |

IEC 60651 Type 1 Limit : ± 0.4 dB per 10 dB step and ± 0.7 dB for overall different.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



Certificate of Calibration

校正證書

Certificate No. : C252625
證書編號

6.2 Time Weighting

6.2.1 Continuous Signal

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 60651 Type 1 Limit (dB) |
|---------------|------------------|------------------------|-------------------|---------------|----------------|------------------------|-----------------------------------|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | | |
| 54 - 134 | $L_{A\text{FP}}$ | A | F | 94.00 | 1 | 94.0 | Ref. |
| | $L_{A\text{SP}}$ | | S | | | 94.0 | ± 0.1 |
| | $L_{A\text{IP}}$ | | I | | | 94.1 | ± 0.1 |

6.2.2 Tone Burst Signal (2 kHz)

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 60651 Type 1 Limit (dB) | |
|---------------|--------------------|------------------------|-------------------|---------------|-------------------|------------------------|-----------------------------------|--|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Burst Duration | | | |
| 34 - 114 | $L_{A\text{FP}}$ | A | F | 106.0 | Continuous | 106.0 | Ref. | |
| | $L_{A\text{FMax}}$ | | | | 200 ms | 105.0 | -1.0 ± 1.0 | |
| | $L_{A\text{SP}}$ | | S | | Continuous | 106.0 | Ref. | |
| | $L_{A\text{SMax}}$ | | | | 500 ms | 102.0 | -4.1 ± 1.0 | |

6.3 Frequency Weighting

6.3.1 A-Weighting

| UUT Setting | | | | Applied Value | | UUT Reading (dB) | IEC 60651 Type 1 Limit (dB) |
|---------------|------------------|------------------------|-------------------|---------------|----------|------------------------|-----------------------------------|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Freq. | | |
| 54 - 134 | $L_{A\text{FP}}$ | A | F | 94.00 | 31.5 Hz | 54.7 | -39.4 ± 1.5 |
| | | | | | 63 Hz | 68.0 | -26.2 ± 1.5 |
| | | | | | 125 Hz | 77.8 | -16.1 ± 1.0 |
| | | | | | 250 Hz | 85.3 | -8.6 ± 1.0 |
| | | | | | 500 Hz | 90.8 | -3.2 ± 1.0 |
| | | | | | 1 kHz | 94.0 | Ref. |
| | | | | | 2 kHz | 95.2 | $+1.2 \pm 1.0$ |
| | | | | | 4 kHz | 94.9 | $+1.0 \pm 1.0$ |
| | | | | | 8 kHz | 92.8 | $-1.1 (+1.5 ; -3.0)$ |
| | | | | | 12.5 kHz | 89.7 | $-4.3 (+3.0 ; -6.0)$ |

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



Certificate of Calibration

校正證書

Certificate No. : C252625
證書編號

6.3.2 C-Weighting

| UUT Setting | | | | Applied Value | | UUT | IEC 60651 |
|-------------|------------------|---------------------|----------------|---------------|----------|--------------|--------------------|
| Range (dB) | Parameter | Frequency Weighting | Time Weighting | Level (dB) | Freq. | Reading (dB) | Type 1 Limit (dB) |
| 54 - 134 | L _{CFP} | C | F | 94.00 | 31.5 Hz | 90.9 | -3.0 ± 1.5 |
| | | | | | 63 Hz | 93.2 | -0.8 ± 1.5 |
| | | | | | 125 Hz | 93.8 | -0.2 ± 1.0 |
| | | | | | 250 Hz | 94.0 | 0.0 ± 1.0 |
| | | | | | 500 Hz | 94.0 | 0.0 ± 1.0 |
| | | | | | 1 kHz | 94.0 | Ref. |
| | | | | | 2 kHz | 93.8 | -0.2 ± 1.0 |
| | | | | | 4 kHz | 93.1 | -0.8 ± 1.0 |
| | | | | | 8 kHz | 90.9 | -3.0 (+1.5 ; -3.0) |
| | | | | | 12.5 kHz | 87.8 | -6.2 (+3.0 ; -6.0) |

6.4 Time Averaging

| UUT Setting | | | | Applied Value | | | | UUT | IEC 60804 |
|-------------|------------------|---------------------|------------------|---------------|---------------------|-------------------|------------------|--------------|-------------------|
| Range (dB) | Parameter | Frequency Weighting | Integrating Time | Freq. (kHz) | Burst Duration (ms) | Burst Duty Factor | Burst Level (dB) | Reading (dB) | Type 1 Limit (dB) |
| 34 - 114 | L _{Aeq} | A | 10 sec. | 4 | 1 | 1/10 | 110.0 | 100 | 99.8 |
| | | | | | | 1/10 ² | | 90 | 90.0 |
| | | | 60 sec. | | | 1/10 ³ | | 80 | 79.6 |
| | | | | | | 1/10 ⁴ | | 70 | 69.6 |
| | | | 5 min. | | | | | | ± 1.0 |

- Remarks : - UUT Microphone Model No. : 4188 & S/N : 2812706
- Mfr's Limit : IEC 60651 Type 1 & IEC 60804 Type 1
- Uncertainties of Applied Value : 94 dB : 31.5 Hz - 125 Hz : ± 0.35 dB
250 Hz - 500 Hz : ± 0.30 dB
1 kHz : ± 0.20 dB
2 kHz - 4 kHz : ± 0.35 dB
8 kHz : ± 0.45 dB
12.5 kHz : ± 0.70 dB
104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)
114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)
Burst equivalent level : ± 0.2 dB (Ref. 110 dB continuous sound level)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. New Creation Calibration Service Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Certificate of Calibration

for

Description: Sound Level Meter
Manufacturer: RION
Type No.: NL-52 (Serial No.: 00921191)
Microphone: RION UC-59 (Serial No.: 12910)
Preamplifier: NH-25 (Serial No.: 32609)

Submitted by:

Customer: Action-United Environmental Services & Consulting
Address: Unit A, 20/F, Gold King Industrial Building
 35-41 Tai Lin Pai Road, Kwai Chung,
 New Territories, Hong Kong

Upon receipt for calibration, the instrument was found to be:

Within (31.5Hz – 8kHz)

Outside

the allowable tolerance.

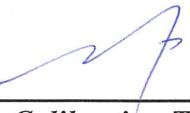
The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

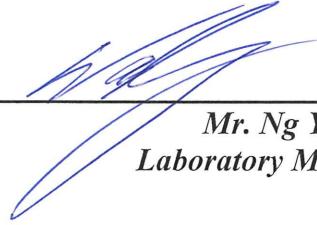
Date of receipt: 16 December 2024

Date of calibration: 20 December 2024

Date of NEXT calibration: 19 December 2025

Calibrated by: 
Calibration Technician

Date of issue: 20 December 2024

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager



Certificate No.: APJ24-111-CC001

Page 1 of 4

1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Conditions:

Air Temperature: 23.3 °C
 Air Pressure: 1005 hPa
 Relative Humidity: 25.1 %

3. Calibration Equipment:

| | Type | Serial No. | Calibration Report Number | Traceable to |
|--------------------------|----------|------------|---------------------------|--------------|
| Multifunction Calibrator | B&K 4226 | 2288467 | AV240081 | HOKLAS |

4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-130 | dBA SPL | Fast | 94 | 1000 | 94.0 | ±0.4 |

Linearity

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-130 | dBA SPL | Fast | 94 | 1000 | 94.0 | Ref |
| | | | 104 | | 104.0 | ±0.3 |
| | | | 114 | | 114.0 | ±0.3 |

Time Weighting

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-130 | dBA SPL | Fast | 94 | 1000 | 94.0 | Ref |
| | | Slow | | | 94.0 | ±0.3 |

Certificate No.: APJ24-111-CC001



Page 2 of 4

Frequency Response

Linear Response

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-130 | dB SPL | Fast | 94 | 31.5 | 94.0 | ± 2.0 |
| | | | | 63 | 94.2 | ± 1.5 |
| | | | | 125 | 94.1 | ± 1.5 |
| | | | | 250 | 94.1 | ± 1.4 |
| | | | | 500 | 94.1 | ± 1.4 |
| | | | | 1000 | 94.0 | Ref |
| | | | | 2000 | 93.6 | ± 1.6 |
| | | | | 4000 | 92.8 | ± 1.6 |
| | | | | 8000 | 91.0 | +2.1; -3.1 |

A-weighting

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-130 | dBA SPL | Fast | 94 | 31.5 | 54.7 | -39.4 ± 2.0 |
| | | | | 63 | 68.0 | -26.2 ± 1.5 |
| | | | | 125 | 78.0 | -16.1 ± 1.5 |
| | | | | 250 | 85.4 | -8.6 ± 1.4 |
| | | | | 500 | 90.8 | -3.2 ± 1.4 |
| | | | | 1000 | 94.0 | Ref |
| | | | | 2000 | 94.8 | $+1.2 \pm 1.6$ |
| | | | | 4000 | 93.8 | $+1.0 \pm 1.6$ |
| | | | | 8000 | 90.1 | $-1.1 + 2.1; -3.1$ |

C-weighting

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-130 | dB C SPL | Fast | 94 | 31.5 | 91.0 | -3.0 ± 2.0 |
| | | | | 63 | 93.3 | -0.8 ± 1.5 |
| | | | | 125 | 93.9 | -0.2 ± 1.5 |
| | | | | 250 | 94.1 | -0.0 ± 1.4 |
| | | | | 500 | 94.1 | -0.0 ± 1.4 |
| | | | | 1000 | 94.0 | Ref |
| | | | | 2000 | 93.5 | -0.2 ± 1.6 |
| | | | | 4000 | 92.0 | -0.8 ± 1.6 |
| | | | | 8000 | 88.1 | $-3.0 + 2.1; -3.1$ |



Certificate No.: APJ24-111-CC001

Page 3 of 4

5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacturer's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

| | | |
|--------|---------|--------|
| 94 dB | 31.5 Hz | ± 0.15 |
| | 63 Hz | ± 0.10 |
| | 125 Hz | ± 0.05 |
| | 250 Hz | ± 0.05 |
| | 500 Hz | ± 0.05 |
| | 1000 Hz | ± 0.05 |
| | 2000 Hz | ± 0.05 |
| | 4000 Hz | ± 0.05 |
| | 8000 Hz | ± 0.10 |
| 104 dB | 1000 Hz | ± 0.05 |
| 114 dB | 1000 Hz | ± 0.05 |

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.



Certificate of Calibration

for

Description: Sound Level Meter
Manufacturer: RION
Type No.: NL-31 (Serial No.: 00410247)
Microphone: UC-53A (Serial No.: 322738)
Preamplifier: NH-21 (Serial No.: 36853)

Submitted by:

Customer: Action-United Environmental Services & Consulting
Address: Unit A, 20/F, Gold King Industrial Building
35-41 Tai Lin Pai Road, Kwai Chung,
New Territories, Hong Kong

Upon receipt for calibration, the instrument was found to be:

Within (31.5Hz – 8kHz)

Outside

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 23 April 2025

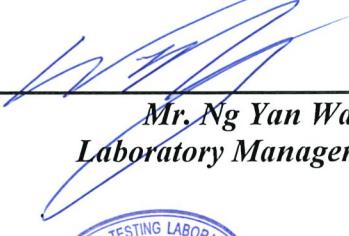
Date of calibration: 28 April 2025

Date of NEXT calibration: 27 April 2026

Calibrated by: 
Calibration Technician

Date of issue: 28 April 2025

Certificate No.: APJ25-008-CC004

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager



Page 1 of 4



1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Conditions:

| | |
|--------------------|----------|
| Air Temperature: | 23.2 °C |
| Air Pressure: | 1006 hPa |
| Relative Humidity: | 50.8 % |

3. Calibration Equipment:

| | Type | Serial No. | Calibration Report Number | Traceable to |
|--------------------------|----------|------------|---------------------------|--------------|
| Multifunction Calibrator | B&K 4226 | 2288467 | AV240081 | HOKLAS |

4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB | |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | | |
| 30-120 | dBA | SPL | Fast | 94 | 1000 | 94.0 | ±0.4 |

Linearity

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB | |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | | |
| 30-120 | dBA | SPL | Fast | 94 | 1000 | 94.0 | Ref |
| | | | | 104 | | 104.0 | ±0.3 |
| | | | | 114 | | 114.0 | ±0.3 |
| | | | | | | | |

Time Weighting

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB | |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | | |
| 30-120 | dBA | SPL | Fast | 94 | 1000 | 94.0 | Ref |
| | | | | | | 94.0 | ±0.3 |

Certificate No.: APJ25-008-CC004



Page 2 of 4



Frequency Response

Linear Response

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-120 | dB SPL | Fast | 94 | 31.5 | 94.1 | ±2.0 |
| | | | | 63 | 94.2 | ±1.5 |
| | | | | 125 | 94.1 | ±1.5 |
| | | | | 250 | 94.1 | ±1.4 |
| | | | | 500 | 94.1 | ±1.4 |
| | | | | 1000 | 94.0 | Ref |
| | | | | 2000 | 93.9 | ±1.6 |
| | | | | 4000 | 93.4 | ±1.6 |
| | | | | 8000 | 92.0 | +2.1; -3.1 |

A-weighting

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-120 | dBA SPL | Fast | 94 | 31.5 | 54.9 | -39.4±2.0 |
| | | | | 63 | 68.1 | -26.2±1.5 |
| | | | | 125 | 78.0 | -16.1±1.5 |
| | | | | 250 | 85.4 | -8.6±1.4 |
| | | | | 500 | 90.8 | -3.2±1.4 |
| | | | | 1000 | 94.0 | Ref |
| | | | | 2000 | 95.0 | +1.2±1.6 |
| | | | | 4000 | 94.4 | +1.0±1.6 |
| | | | | 8000 | 91.0 | -1.1+2.1; -3.1 |

C-weighting

| Setting of Unit-under-test (UUT) | | | Applied value | | UUT Reading, dB | IEC 61672 Class 1 Specification, dB |
|----------------------------------|-----------------|----------------|---------------|---------------|-----------------|-------------------------------------|
| Range, dB | Freq. Weighting | Time Weighting | Level, dB | Frequency, Hz | | |
| 30-120 | dB SPL | Fast | 94 | 31.5 | 91.2 | -3.0±2.0 |
| | | | | 63 | 93.4 | -0.8±1.5 |
| | | | | 125 | 94.0 | -0.2±1.5 |
| | | | | 250 | 94.1 | -0.0±1.4 |
| | | | | 500 | 95.1 | -0.0±1.4 |
| | | | | 1000 | 94.0 | Ref |
| | | | | 2000 | 93.7 | -0.2±1.6 |
| | | | | 4000 | 92.6 | -0.8±1.6 |
| | | | | 8000 | 89.1 | -3.0+2.1; -3.1 |

Certificate No.: APJ25-008-CC004



Page 3 of 4



5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacturer's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

| | | |
|--------|---------|--------|
| 94 dB | 31.5 Hz | ± 0.10 |
| | 63 Hz | ± 0.10 |
| | 125 Hz | ± 0.05 |
| | 250 Hz | ± 0.05 |
| | 500 Hz | ± 0.05 |
| | 1000 Hz | ± 0.05 |
| | 2000 Hz | ± 0.05 |
| | 4000 Hz | ± 0.05 |
| | 8000 Hz | ± 0.10 |
| 104 dB | 1000 Hz | ± 0.05 |
| 114 dB | 1000 Hz | ± 0.05 |

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.

Certificate No.: APJ25-008-CC004



Page 4 of 4



Certificate of Calibration 校正證書

Certificate No. : C252628
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引[編號 : IC25-0908) Date of Receipt / 收件日期 : 7 November 2025

Description / 儀器名稱 : Sound Calibrator (EQ082)
Manufacturer / 製造商 : Brüel & Kjær
Model No. / 型號 : 4231
Serial No. / 編號 : 2713428
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 3)°C
Line Voltage / 電壓 : ---

Relative Humidity / 相對濕度 : (50 ± 25)%

TEST SPECIFICATIONS / 測試規範

Calibration

DATE OF TEST / 測試日期 : 19 November 2025

TEST RESULTS / 測試結果

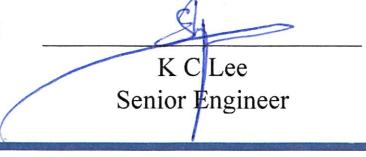
The results apply to the particular unit-under-test only.
The results do not exceed specified limits. (after adjustment)
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies

Tested By : 
測試

C K Lo
Project Engineer

Certified By : 
核證

K C Lee
Senior Engineer

Date of Issue : 19 November 2025
簽發日期

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



Certificate of Calibration 校正證書

Certificate No. : C252628
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 1 hour before the commencement of the test.
2. The results presented are the mean of 3 measurements at each calibration point.
3. Test equipment :

| <u>Equipment ID</u> | <u>Description</u> | <u>Certificate No.</u> |
|---------------------|------------------------|------------------------|
| CL456 | 6 1/2 Digit Multimeter | SO219304-4 |
| CL461 | Sound Calibrator | CDK2502138 |

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

5.1.1 Before Adjustment

| UUT Nominal Value | Measured Value (dB) | Mfr's Limit (dB) | Uncertainty of Measured Value (dB) |
|----------------------|------------------------|---------------------|---------------------------------------|
| 94 dB, 1 kHz | * 94.3 | ± 0.2 | ± 0.2 |
| 114 dB, 1 kHz | * 114.4 | | |

* Out of Mfr's Limit

5.1.2 After Adjustment

| UUT Nominal Value | Measured Value (dB) | Mfr's Limit (dB) | Uncertainty of Measured Value (dB) |
|----------------------|------------------------|---------------------|---------------------------------------|
| 94 dB, 1 kHz | 94.0 | ± 0.2 | ± 0.2 |
| 114 dB, 1 kHz | 114.0 | | |

5.2 Frequency Accuracy

5.2.1 Before Adjustment

| UUT Nominal Value (kHz) | Measured Value (kHz) | Mfr's Limit | Uncertainty of Measured Value (Hz) |
|----------------------------|-------------------------|----------------|---------------------------------------|
| 1 | 1.000 0 | 1 kHz ± 0.1 % | ± 0.1 |

5.2.2 After Adjustment

| UUT Nominal Value (kHz) | Measured Value (kHz) | Mfr's Limit | Uncertainty of Measured Value (Hz) |
|----------------------------|-------------------------|----------------|---------------------------------------|
| 1 | 1.000 0 | 1 kHz ± 0.1 % | ± 0.1 |

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Certificate of Calibration 校正證書

Certificate No. : C252628
證書編號

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. New Creation Calibration Service Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



Certificate of Calibration

for

Description: Sound Level Calibrator

Manufacturer: RION

Type No.: NC-75

Serial No.: 34680623

Submitted by:

Customer: Action-United Environmental Services & Consulting

Address: Unit A, 20/F, Gold King Industrial Building
35-41 Tai Lin Pai Road, Kwai Chung,
New Territories, Hong Kong

Upon receipt for calibration, the instrument was found to be:

Within
 Outside

the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

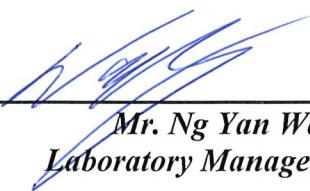
Date of receipt: 23 April 2025

Date of calibration: 28 April 2025

Date of NEXT calibration: 27 April 2026

Calibrated by: 
Calibration Technician

Date of issue: 28 April 2025

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Certificate No.: APJ25-008-CC005



Page 1 of 2

1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Specifications:

Calibration check

3. Calibration Conditions:

| | |
|--------------------|----------|
| Air Temperature: | 23.2 °C |
| Air Pressure: | 1006 hPa |
| Relative Humidity: | 50.8 % |

4. Calibration Equipment:

| Test Equipment | Type | Serial No. | Calibration Report Number | Traceable to |
|--------------------------|------------|------------|---------------------------|--------------|
| Multifunction Calibrator | B&K 4226 | 2288467 | AV240081 | HOKLAS |
| Sound Level Meter | RION NA-28 | 30721812 | AV240109 | HOKLAS |

5. Calibration Results**5.1 Sound Pressure Level**

| Nominal value dB | Accept lower level dB | Accept upper level dB | Measured value dB |
|---------------------|--------------------------|--------------------------|----------------------|
| 94.0 | 93.6 | 94.4 | 94.0 |

6. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacturer's specification as IEC 60942 Class 1.

Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ25-008-CC005

Page 2 of 2



Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation 認可證書

This is to certify that
特此證明

ALS TECHNICHEM (HK) PTY LIMITED

11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, New Territories, Hong Kong
香港新界葵涌永業街1-3號忠信針織中心11樓

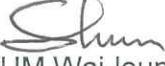
*is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017
for performing specific laboratory activities as listed in the scope of accreditation within the test category of*
獲香港認可處根據ISO/IEC 17025:2017認可
進行載於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing 環境測試

*This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and
the implementation of a management system relevant to laboratory operation
(see joint IAF-ILAC-ISO Communiqué).*

此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並
實施一套與實驗所運作相關的管理體系
(見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive
現經香港認可處執行機關授權在此蓋上香港認可處的印章


SHUM Wai-leung, Executive Administrator
執行幹事 沈偉良

Issue Date : 28 February 2020
簽發日期：二零二零年二月二十八日

Registration Number : **HOKLAS 066**
註冊號碼：

Date of First Registration : 15 September 1995
首次註冊日期：一九九五年九月十五日



Appendix F

Event and Action Plan

Event / Action Plan for construction dust

| Event | Action | | | |
|---|--|---|--|---|
| | ET | IEC | ER | Contractor |
| Action Level exceedance for one sample | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC, ER and Contractor; Repeat measurement to confirm finding; and Increase monitoring frequency to daily. | <ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method; and Review and advise the ET and ER on the effectiveness of the proposed remedial measures. | 1. Notify Contractor. | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Rectify any unacceptable practice and implement remedial measures; and Amend working methods agreed with ER if appropriate. |
| Action Level exceedance for two or more consecutive samples | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC, ER and Contractor; Advise the ER and Contractor on the effectiveness of the proposed remedial measures; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC, ER and Contractor on remedial actions required; If exceedance continues, arrange meeting with IEC and ER; and If exceedance stops, cease additional monitoring. | <ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET and ER on the effectiveness of the proposed remedial measures; and Supervise Implementation of remedial measures. | <ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; and Supervise and ensure remedial measures properly implemented. | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; Implement the agreed proposals; and Amend proposal if appropriate. |
| Limit Level exceedance for one sample | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor, IEC and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; and Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. | <ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET, ER and Contractor on possible remedial measures; Advise the ER and ET on the effectiveness of the proposed remedial measures; and Supervise implementation of remedial measures. | <ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; and Supervise and ensure remedial measures properly implemented. | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Take immediate action to avoid further exceedance; Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; Implement the agreed proposals; and Amend proposal if appropriate. |
| Limit Level exceedance for two or more consecutive samples | <ol style="list-style-type: none"> Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and If exceedance stops, cease additional monitoring. | <ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method; Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; Supervise and ensure remedial measures properly implemented; and If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. | <ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Take immediate action to avoid further exceedance; Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; and Stop the relevant portion of works as determined by the ER until the exceedance is abated. |

Event and Action Plan for Construction Noise

| Event | Action | | | |
|-------------------------|--|--|---|--|
| | ET | IEC | ER | Contractor |
| Action Level Exceedance | <ol style="list-style-type: none"> Notify IEC, ER and Contractor; Carry out investigation; Report the results of investigation to the IEC, ER and Contractor; Discuss with the Contractor and formulate remedial measures; and Increase monitoring frequency to check mitigation effectiveness. | <ol style="list-style-type: none"> Review the analysed results submitted by the ET; Review the proposed remedial measures by the Contractor and advise the ER accordingly; and Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; and Ensure remedial measures are properly implemented. | <ol style="list-style-type: none"> Submit noise mitigation proposals to IEC and ER; and Implement noise mitigation proposals. |
| Limit Level Exceedance | <ol style="list-style-type: none"> Identify source; Inform IEC, ER, EPD and Contractor; Repeat measurements to confirm findings; Increase monitoring frequency; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Inform IEC, ER and EPD the causes and actions taken for the exceedances; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and If exceedance stops, cease additional monitoring. | <ol style="list-style-type: none"> Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures properly implemented; and If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. | <ol style="list-style-type: none"> Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; and Stop the relevant portion of works as determined by the ER until the exceedance is abated. |

Appendix G

Impact Monitoring Schedule

Impact Monitoring Schedule for the Reporting Period

| Date | | NOISE MONITORING (0700 – 1900) | AIR QUALITY MONITORING | |
|-------------|-----------|---|-------------------------------|--------------------|
| | | | 1-HOUR TSP | 24-HOUR TSP |
| Sat | 1-Nov-25 | | ✓ | |
| Sun | 2-Nov-25 | | | |
| Mon | 3-Nov-25 | | | ✓ |
| Tue | 4-Nov-25 | | | |
| Wed | 5-Nov-25 | | | |
| Thu | 6-Nov-25 | | | |
| Fri | 7-Nov-25 | ✓ | ✓ | |
| Sat | 8-Nov-25 | | | ✓ |
| Sun | 9-Nov-25 | | | |
| Mon | 10-Nov-25 | | | |
| Tue | 11-Nov-25 | | | |
| Wed | 12-Nov-25 | | | |
| Thu | 13-Nov-25 | ✓ | ✓ | |
| Fri | 14-Nov-25 | | | ✓ |
| Sat | 15-Nov-25 | | | |
| Sun | 16-Nov-25 | | | |
| Mon | 17-Nov-25 | | | |
| Tue | 18-Nov-25 | | | |
| Wed | 19-Nov-25 | ✓ | ✓ | |
| Thu | 20-Nov-25 | | | ✓ |
| Fri | 21-Nov-25 | | | |
| Sat | 22-Nov-25 | | | |
| Sun | 23-Nov-25 | | | |
| Mon | 24-Nov-25 | | | |
| Tue | 25-Nov-25 | ✓ | ✓ | |
| Wed | 26-Nov-25 | | | ✓ |
| Thu | 27-Nov-25 | | | |
| Fri | 28-Nov-25 | | | |
| Sat | 29-Nov-25 | | | |
| Sun | 30-Nov-25 | | | |

| | |
|---|--------------------------|
| ✓ | Monitoring Day |
| | Sunday or Public Holiday |

Impact Monitoring Schedule for next Reporting Period

| Date | | NOISE MONITORING (0700 – 1900) | AIR QUALITY MONITORING | |
|-------------|-----------|---|-------------------------------|--------------------|
| | | | 1-HOUR TSP | 24-HOUR TSP |
| Mon | 1-Dec-25 | ✓ | ✓ | |
| Tue | 2-Dec-25 | | | ✓ |
| Wed | 3-Dec-25 | | | |
| Thu | 4-Dec-25 | | | |
| Fri | 5-Dec-25 | | | |
| Sat | 6-Dec-25 | | ✓ | |
| Sun | 7-Dec-25 | | | |
| Mon | 8-Dec-25 | | | ✓ |
| Tue | 9-Dec-25 | | | |
| Wed | 10-Dec-25 | | | |
| Thu | 11-Dec-25 | ✓ | ✓ | |
| Fri | 12-Dec-25 | | | |
| Sat | 13-Dec-25 | | | ✓ |
| Sun | 14-Dec-25 | | | |
| Mon | 15-Dec-25 | | | |
| Tue | 16-Dec-25 | | | |
| Wed | 17-Dec-25 | ✓ | ✓ | |
| Thu | 18-Dec-25 | | | |
| Fri | 19-Dec-25 | | | ✓ |
| Sat | 20-Dec-25 | | | |
| Sun | 21-Dec-25 | | | |
| Mon | 22-Dec-25 | | | |
| Tue | 23-Dec-25 | ✓ | ✓ | |
| Wed | 24-Dec-25 | | | ✓ |
| Thu | 25-Dec-25 | | | |
| Fri | 26-Dec-25 | | | |
| Sat | 27-Dec-25 | | | |
| Sun | 28-Dec-25 | | | |
| Mon | 29-Dec-25 | ✓ | ✓ | |
| Tue | 30-Dec-25 | | | ✓ |
| Wed | 31-Dec-25 | | | |

| | |
|---|--------------------------|
| ✓ | Monitoring Day |
| | Sunday or Public Holiday |

Appendix H

Database of Monitoring Result

24-HOUR TSP MONITORING RESULT DATABASE

24-hour TSP Monitoring Data for AMS1a

| DATE | SAMPLE NUMBER | ELAPSED TIME | | | CHART READING | | | AVG TEMP (°C) | AVG AIR PRESS (hPa) | STANDARD FLOW RATE (m³/min) | AIR VOLUME (std m³) | FILTER WEIGHT (g) | | DUST WEIGHT COLLECTED (g) | 24-hr TSP (µg/m³) |
|-----------|---------------|--------------|----------|---------|---------------|-----|-----|---------------|---------------------|-----------------------------|---------------------|-------------------|--------|---------------------------|-------------------|
| | | INITIAL | FINAL | (min) | MIN | MAX | AVG | | | | | INITIAL | FINAL | | |
| 3-Nov-25 | 22015 | 29759.96 | 29783.96 | 1440.00 | 41 | 41 | 41 | 24.8 | 1016.6 | 1.47 | 2114 | 2.6184 | 2.685 | 0.0666 | 32 |
| 8-Nov-25 | 21962 | 29783.96 | 29807.96 | 1440.00 | 41 | 41 | 41 | 28.1 | 1015.4 | 1.46 | 2105 | 2.7412 | 2.7823 | 0.0411 | 20 |
| 14-Nov-25 | 22062 | 29807.96 | 29831.96 | 1440.00 | 41 | 41 | 41 | 26 | 1017.1 | 1.47 | 2111 | 2.6063 | 2.6657 | 0.0594 | 28 |
| 20-Nov-25 | 22066 | 29831.96 | 29855.96 | 1440.00 | 41 | 41 | 41 | 18.2 | 1023.7 | 1.48 | 2135 | 2.6114 | 2.6892 | 0.0778 | 36 |
| 26-Nov-25 | 22063 | 29855.96 | 29879.96 | 1440.00 | 41 | 41 | 41 | 22.8 | 1019.5 | 1.47 | 2121 | 2.6045 | 2.723 | 0.1185 | 56 |

24-hour TSP Monitoring Data for AMS-5

| DATE | SAMPLE NUMBER | ELAPSED TIME | | | CHART READING | | | AVG TEMP (°C) | AVG AIR PRESS (hPa) | STANDARD FLOW RATE (m³/min) | AIR VOLUME (std m³) | FILTER WEIGHT (g) | | DUST WEIGHT COLLECTED (g) | 24-hr TSP (µg/m³) |
|-----------|---------------|--------------|----------|---------|---------------|-----|------|---------------|---------------------|-----------------------------|---------------------|-------------------|--------|---------------------------|-------------------|
| | | INITIAL | FINAL | (min) | MIN | MAX | AVG | | | | | INITIAL | FINAL | | |
| 3-Nov-25 | 22013 | 17805.09 | 17829.09 | 1440.00 | 39 | 39 | 39.0 | 24.8 | 1017.9 | 1.39 | 2002 | 2.6182 | 2.6700 | 0.0518 | 26 |
| 8-Nov-25 | 21961 | 17829.09 | 17853.09 | 1440.00 | 39 | 39 | 39.0 | 28.1 | 1015.4 | 1.38 | 1993 | 2.7244 | 2.7675 | 0.0431 | 22 |
| 14-Nov-25 | 22067 | 17853.09 | 17877.09 | 1440.00 | 39 | 39 | 39.0 | 26 | 1017.1 | 1.39 | 1999 | 2.6207 | 2.6713 | 0.0506 | 25 |
| 20-Nov-25 | 22064 | 17877.09 | 17901.09 | 1440.00 | 39 | 39 | 39.0 | 18.2 | 1023.2 | 1.40 | 2021 | 2.5885 | 2.6536 | 0.0651 | 32 |
| 26-Nov-25 | 22058 | 17901.09 | 17925.09 | 1440.00 | 39 | 39 | 39.0 | 22.8 | 1019.5 | 1.39 | 2008 | 2.6129 | 2.7734 | 0.1605 | 80 |

24-hour TSP Monitoring Data for AMS-6

| DATE | SAMPLE NUMBER | ELAPSED TIME | | | CHART READING | | | AVG TEMP (°C) | AVG AIR PRESS (hPa) | STANDARD FLOW RATE (m³/min) | AIR VOLUME (std m³) | FILTER WEIGHT (g) | | DUST WEIGHT COLLECTED (g) | 24-hr TSP (µg/m³) |
|-----------|---------------|--------------|----------|---------|---------------|-----|------|---------------|---------------------|-----------------------------|---------------------|-------------------|--------|---------------------------|-------------------|
| | | INITIAL | FINAL | (min) | MIN | MAX | AVG | | | | | INITIAL | FINAL | | |
| 3-Nov-25 | 22012 | 22872.10 | 22896.10 | 1440.00 | 42 | 42 | 42.0 | 24.8 | 1017.9 | 1.46 | 2106 | 2.6094 | 2.7060 | 0.0966 | 46 |
| 8-Nov-25 | 22011 | 22896.10 | 22920.10 | 1440.00 | 42 | 42 | 42.0 | 28.1 | 1015.4 | 1.46 | 2095 | 2.6252 | 2.7033 | 0.0781 | 37 |
| 14-Nov-25 | 22068 | 22920.10 | 22944.10 | 1440.00 | 42 | 42 | 42.0 | 26 | 1017.1 | 1.46 | 2102 | 2.6189 | 2.7061 | 0.0872 | 41 |
| 20-Nov-25 | 22065 | 22944.10 | 22968.10 | 1440.00 | 42 | 42 | 42.0 | 18.2 | 1023.2 | 1.48 | 2126 | 2.6007 | 2.7192 | 0.1185 | 56 |
| 26-Nov-25 | 22060 | 22968.10 | 22992.10 | 1440.00 | 42 | 42 | 42.0 | 22.8 | 1019.5 | 1.47 | 2112 | 2.6226 | 2.8327 | 0.2101 | 99 |

24-hour TSP Monitoring Data for AMS-7

| DATE | SAMPLE NUMBER | ELAPSED TIME | | | CHART READING | | | AVG TEMP (°C) | AVG AIR PRESS (hPa) | STANDARD FLOW RATE (m³/min) | AIR VOLUME (std m³) | FILTER WEIGHT (g) | | DUST WEIGHT COLLECTED (g) | 24-hr TSP (µg/m³) |
|-----------|---------------|--------------|----------|---------|---------------|-----|------|---------------|---------------------|-----------------------------|---------------------|-------------------|--------|---------------------------|-------------------|
| | | INITIAL | FINAL | (min) | MIN | MAX | AVG | | | | | INITIAL | FINAL | | |
| 3-Nov-25 | 22014 | 17675.32 | 17699.32 | 1440.00 | 41 | 41 | 41.0 | 24.8 | 1017.9 | 1.44 | 2066 | 2.6225 | 2.6480 | 0.0255 | 12 |
| 8-Nov-25 | 22010 | 17699.32 | 17723.32 | 1440.00 | 41 | 41 | 41.0 | 28.1 | 1015.4 | 1.43 | 2057 | 2.6304 | 2.7263 | 0.0959 | 47 |
| 14-Nov-25 | 22069 | 17723.32 | 17747.32 | 1440.00 | 41 | 41 | 41.0 | 26 | 1017.1 | 1.43 | 2063 | 2.6155 | 2.7401 | 0.1246 | 60 |
| 20-Nov-25 | 22061 | 17747.32 | 17771.32 | 1440.00 | 41 | 41 | 41.0 | 18.2 | 1023.7 | 1.45 | 2087 | 2.6159 | 2.7262 | 0.1103 | 53 |
| 26-Nov-25 | 22059 | 17771.32 | 17795.32 | 1440.00 | 41 | 41 | 41.0 | 22.8 | 1019.5 | 1.44 | 2073 | 2.6218 | 2.6624 | 0.0406 | 20 |

NOISE MONITORING RESULT DATABASE FOR CONTRACT 1

| Noise Measurement Results (dB) of NMS1 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|------------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30 min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 9:25 | 69.4 | 73.4 | 58.3 | 67.5 | 72.3 | 56.1 | 66.0 | 68.6 | 56.2 | 69.6 | 70.8 | 61.9 | 66.6 | 69.1 | 57.5 | 66.7 | 71.1 | 54.7 | 68 | 70 |
| 13-Nov-25 | 9:30 | 64.9 | 69.6 | 57.9 | 66.5 | 71.1 | 56.9 | 68.7 | 72.2 | 56.9 | 67.9 | 71.9 | 56.5 | 68.1 | 72.6 | 58.0 | 69.3 | 73.8 | 58.8 | 68 | 70 |
| 19-Nov-25 | 9:35 | 69.5 | 74.1 | 58.2 | 70.4 | 74.9 | 57.8 | 71.6 | 75.1 | 58.4 | 68.3 | 73.1 | 57.5 | 69.6 | 74.2 | 57.9 | 70.2 | 74.9 | 57.1 | 70 | 70 |
| 25-Nov-25 | 9:35 | 68.5 | 72.2 | 65.2 | 73.2 | 76.7 | 56.6 | 71.4 | 75.0 | 60.6 | 68.5 | 72.2 | 55.3 | 69.4 | 72.3 | 62.1 | 69.6 | 72.6 | 62.2 | 70 | 70 |

| Noise Measurement Results (dB) of NMS2 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|------------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30 min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 10:30 | 58.1 | 61.6 | 51.3 | 59.7 | 63.5 | 51.7 | 58.7 | 59.7 | 57.9 | 63.1 | 66.3 | 56.7 | 60.8 | 64.7 | 57.3 | 62.2 | 66.8 | 58.5 | 61 | 70 |
| 13-Nov-25 | 10:30 | 61.1 | 63.5 | 58.0 | 62.8 | 65.3 | 59.1 | 61.5 | 64.7 | 59.5 | 62.5 | 65.0 | 58.8 | 60.9 | 63.0 | 58.2 | 62.2 | 66.8 | 58.5 | 62 | 70 |
| 19-Nov-25 | 10:35 | 66.4 | 69.7 | 56.7 | 62.9 | 57.2 | 53.0 | 64.9 | 68.2 | 57.4 | 63.1 | 66.3 | 55.1 | 61.3 | 65.7 | 54.8 | 65.1 | 68.2 | 56.4 | 64 | 70 |
| 25-Nov-25 | 10:34 | 63.8 | 64.8 | 59.5 | 66.3 | 67.1 | 59.8 | 63.9 | 64.8 | 60.5 | 64.2 | 66.9 | 60.0 | 63.6 | 66.2 | 57.0 | 66.8 | 70.9 | 59.6 | 65 | 70 |

| Noise Measurement Results (dB) of NMS3 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|-----------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 13:00 | 62.4 | 66.5 | 55.1 | 61.8 | 64.9 | 57.2 | 63.8 | 65.5 | 57.8 | 59.8 | 62.7 | 53.4 | 63.9 | 67.6 | 60.0 | 62.8 | 64.5 | 57.1 | 63 | 75 |
| 13-Nov-25 | 14:00 | 62.5 | 65.0 | 56.5 | 61.5 | 63.5 | 57.0 | 62.7 | 64.5 | 57.0 | 62.9 | 65.5 | 57.5 | 61.9 | 64.3 | 57.0 | 62.2 | 64.8 | 57.5 | 62 | 75 |
| 19-Nov-25 | 13:00 | 64.8 | 66.0 | 57.5 | 64.1 | 65.5 | 58.5 | 62.7 | 66.5 | 59.5 | 63.3 | 66.5 | 60.0 | 62.7 | 65.0 | 59.5 | 64.4 | 67.5 | 59.0 | 64 | 75 |
| 25-Nov-25 | 13:15 | 58.8 | 61.9 | 54.1 | 59.2 | 62.0 | 54.0 | 58.5 | 60.7 | 53.9 | 59.5 | 62.7 | 54.9 | 58.5 | 61.1 | 53.7 | 59.1 | 61.9 | 54.6 | 59 | 75 |

| Noise Measurement Results (dB) of NMS4a | | | | | | | | | | | | | | | | | | | | | |
|---|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|---------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30m, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 10:30 | 61.9 | 63.8 | 59.6 | 61.3 | 62.7 | 59.1 | 63.8 | 65.5 | 62.5 | 61.7 | 63.2 | 59.8 | 65.1 | 67.5 | 62.0 | 64.9 | 66.5 | 64.0 | 63 | 75 |
| 13-Nov-25 | 10:35 | 66.0 | 67.9 | 61.9 | 68.2 | 70.7 | 61.3 | 64.2 | 67.0 | 60.9 | 66.3 | 68.2 | 60.1 | 64.7 | 66.8 | 59.9 | 65.4 | 67.5 | 62.4 | 66 | 75 |
| 19-Nov-25 | 10:40 | 60.9 | 63.1 | 57.5 | 63.3 | 65.5 | 59.3 | 61.5 | 65.5 | 58.8 | 62.1 | 65.8 | 60.9 | 63.8 | 66.7 | 59.2 | 61.4 | 67.2 | 57.7 | 62 | 75 |
| 25-Nov-25 | 10:45 | 65.7 | 67.5 | 62.2 | 62.0 | 63.6 | 60.2 | 63.7 | 64.6 | 60.6 | 59.5 | 61.0 | 57.4 | 60.7 | 62.3 | 58.8 | 67.4 | 69.6 | 64.7 | 64 | 75 |

| Noise Measurement Results (dB) of NMS5 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|-----------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 11:26 | 62.4 | 65.1 | 58.1 | 64.3 | 65.7 | 62.0 | 64.6 | 66.4 | 62.2 | 62.6 | 65.0 | 59.5 | 59.8 | 61.1 | 58.3 | 66.6 | 67.3 | 65.8 | 64 | 75 |
| 13-Nov-25 | 11:15 | 62.9 | 65.0 | 60.5 | 63.8 | 66.1 | 61.0 | 63.2 | 66.0 | 61.0 | 63.8 | 66.8 | 70.5 | 64.8 | 67.5 | 61.5 | 64.0 | 67.5 | 62.0 | 64 | 75 |
| 19-Nov-25 | 11:20 | 62.5 | 63.9 | 60.2 | 62.9 | 64.6 | 60.5 | 63.2 | 64.9 | 61.1 | 61.9 | 63.4 | 60.9 | 63.1 | 64.5 | 61.0 | 62.2 | 63.5 | 60.8 | 63 | 75 |
| 25-Nov-25 | 11:24 | 63.8 | 65.6 | 61.7 | 64.0 | 66.4 | 62.2 | 63.6 | 64.6 | 61.7 | 64.1 | 65.9 | 61.8 | 60.9 | 61.1 | 58.3 | 63.8 | 65.6 | 61.7 | 63 | 75 |

| Noise Measurement Results (dB) of NMS6 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|-----------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 10:21 | 65.3 | 67.9 | 61.2 | 58.1 | 59.5 | 56.2 | 67.3 | 68.4 | 64.0 | 64.7 | 66.3 | 60.5 | 67.9 | 69.4 | 65.0 | 69.7 | 72.5 | 63.5 | 67 | 75 |
| 13-Nov-25 | 10:20 | 68.4 | 70.5 | 65.5 | 69.9 | 71.5 | 66.5 | 65.8 | 68.5 | 60.5 | 67.2 | 69.5 | 64.5 | 67.9 | 70.0 | 65.0 | 69.7 | 72.5 | 63.5 | 68 | 75 |
| 19-Nov-25 | 10:25 | 66.0 | 68.2 | 62.5 | 65.3 | 66.4 | 63.4 | 67.3 | 68.4 | 64.0 | 67.4 | 68.4 | 54.2 | 68.2 | 63.4 | 66.9 | 68.7 | 68.7 | 62.6 | 67 | 75 |
| 25-Nov-25 | 10:21 | 67.2 | 69.2 | 63.5 | 68.6 | 71.9 | 62.9 | 65.3 | 68.8 | 63.6 | 68.4 | 69.8 | 62.3 | 63.2 | 66.5 | 61.8 | 62.4 | 65.5 | 58.9 | 66 | 75 |

| Noise Measurement Results (dB) of NMS7 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|-----------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 9:32 | 65.3 | 67.5 | 59.5 | 61.2 | 65.3 | 55.3 | 63.6 | 65.3 | 60.9 | 62.7 | 64.5 | 60.5 | 64.5 | 67.6 | 59.9 | 63.3 | 66.1 | 60.3 | 64 | 75 |
| 13-Nov-25 | 10:45 | 65.9 | 68.4 | 55.6 | 64.2 | 67.8 | 55.5 | 62.9 | 66.0 | 56.3 | 61.6 | 64.2 | 56.0 | 65.8 | 68.9 | 59.2 | 61.8 | 65.3 | 58.9 | 64 | 75 |
| 19-Nov-25 | 11:20 | 61.8 | 62.9 | 58.7 | 61.8 | 64.2 | 57.5 | 65.2 | 65.3 | 60.8 | 63.7 | 65.7 | 59.9 | 64.1 | 66.1 | 60.2 | 65.6 | 67.9 | 60.9 | 64 | 75 |
| 25-Nov-25 | 9:00 | 63.7 | 67.5 | 57.5 | 61.2 | 63.3 | 58.4 | 60.9 | 64.4 | 55.2 | 63.2 | 65.9 | 56.0 | 62.8 | 65.3 | 56.7 | 60.6 | 62.2 | 56.7 | 62 | 75 |

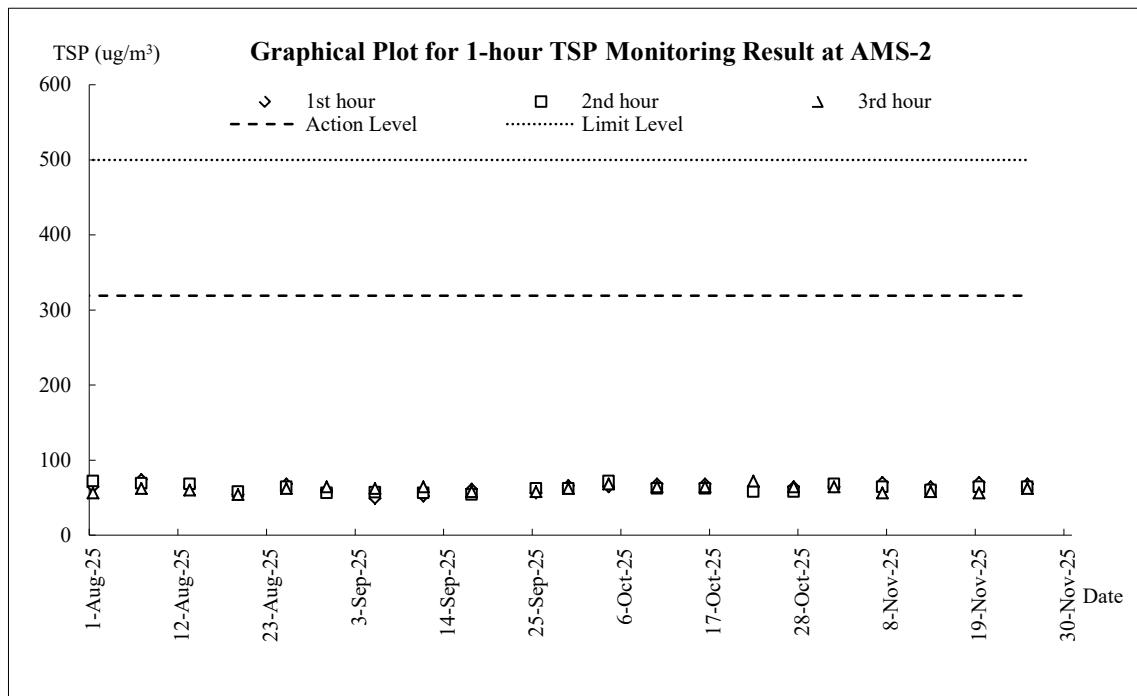
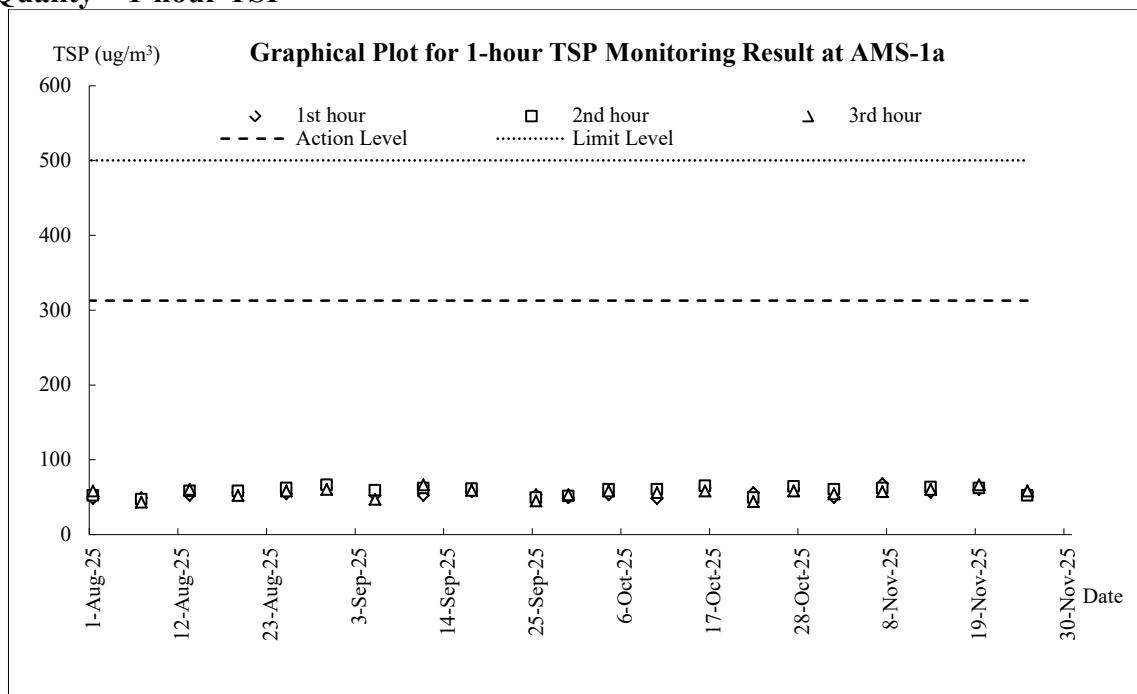
| Noise Measurement Results (dB) of NMS8 | | | | | | | | | | | | | | | | | | | | | |
|--|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|-----------------|-------------------|
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30min, dB(A) | Limit Level dB(A) |
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 14:25 | 60.6 | 65.2 | 60.0 | 67.0 | 70.4 | 58.2 | 63.4 | 67.1 | 55.8 | 60.8 | 63.1 | 52.7 | 61.7 | 65.3 | 54.3 | 63.4 | 65.9 | 56.4 | 63 | 75 |
| 13-Nov-25 | 13:40 | 61.6 | 63.0 | 57.5 | 63.2 | 66.0 | 58.0 | 64.8 | 66.5 | 58.0 | 65.1 | 68.0 | 60.0 | 62.5 | 66.0 | 58.0 | 63.4 | 65.5 | 57.5 | 64 | 75 |
| 19-Nov-25 | 14:00 | 62.9 | 66.5 | 60.0 | 63.6 | 66.5 | 60.0 | 63.7 | 67.0 | 60.5 | 63.8 | 68.0 | 60.0 | 62.2 | 67.5 | 59.5 | 63.1 | 67.5 | 60.0 | 63 | 75 |
| 25-Nov-25 | 13:45 | 65.5 | 69.3 | 60.6 | 61.7 | 63.1 | 60.0 | 61.9 | 63.7 | 55.6 | 63.3 | 65.9 | 56.2 | 61.5 | 64.0 | 55.9 | 62.6 | 64.4 | 55.1 | 63 | 75 |

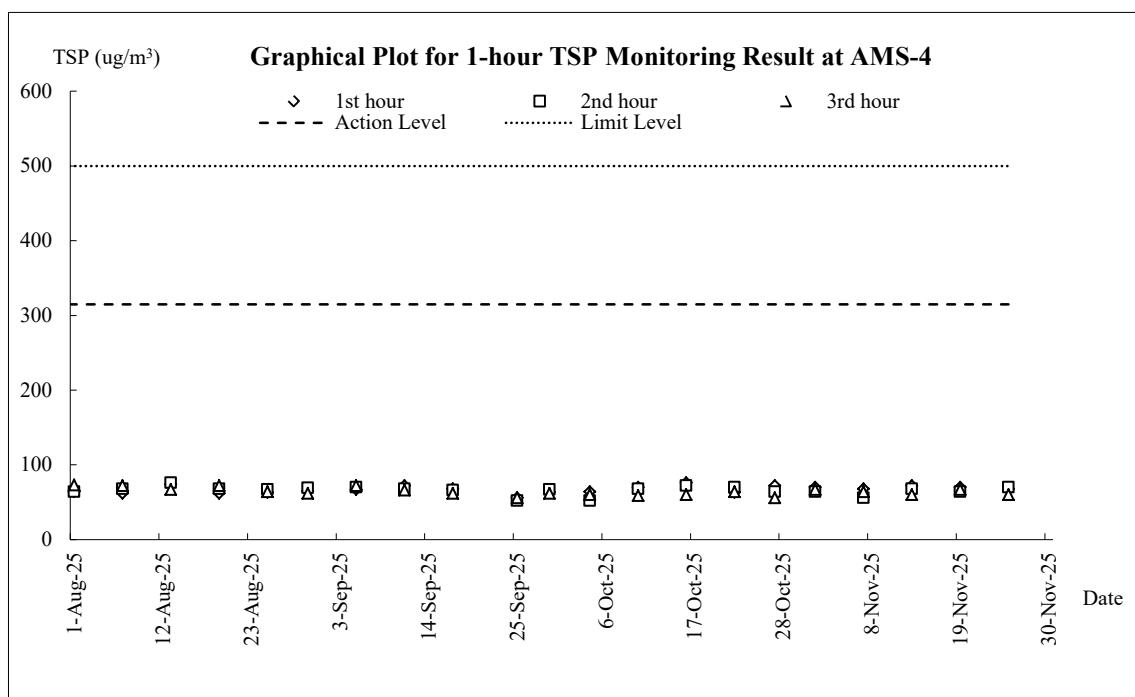
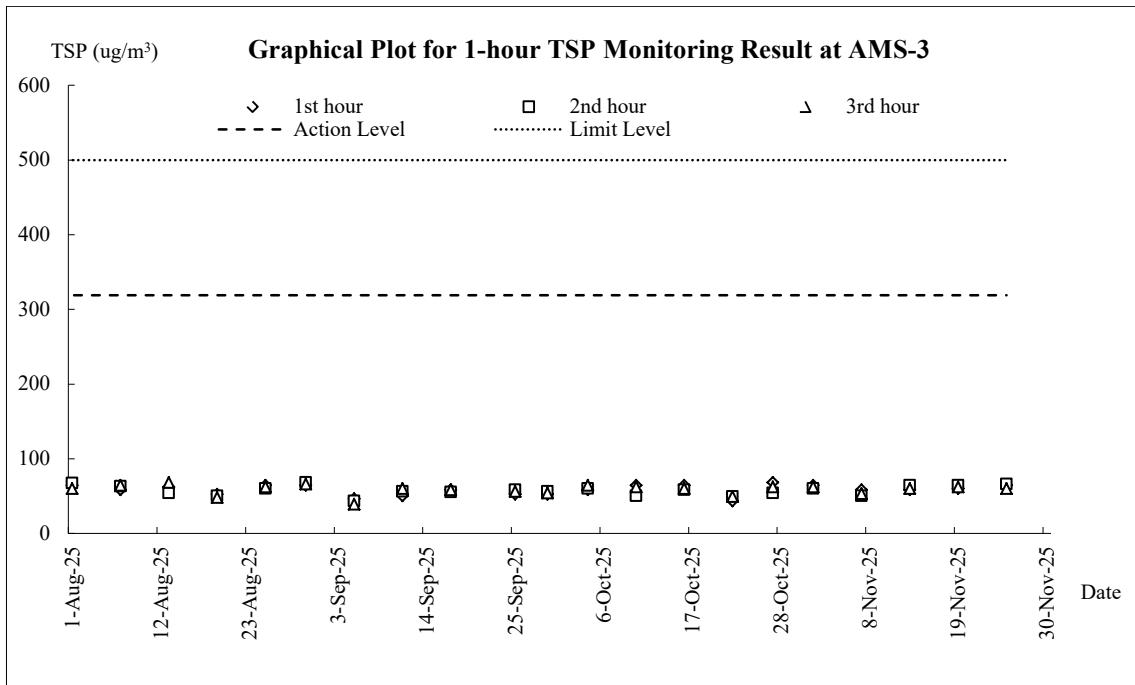
NOISE MONITORING RESULT DATABASE FOR CONTRACT 3**Noise Measurement Results (dB) of CN3**

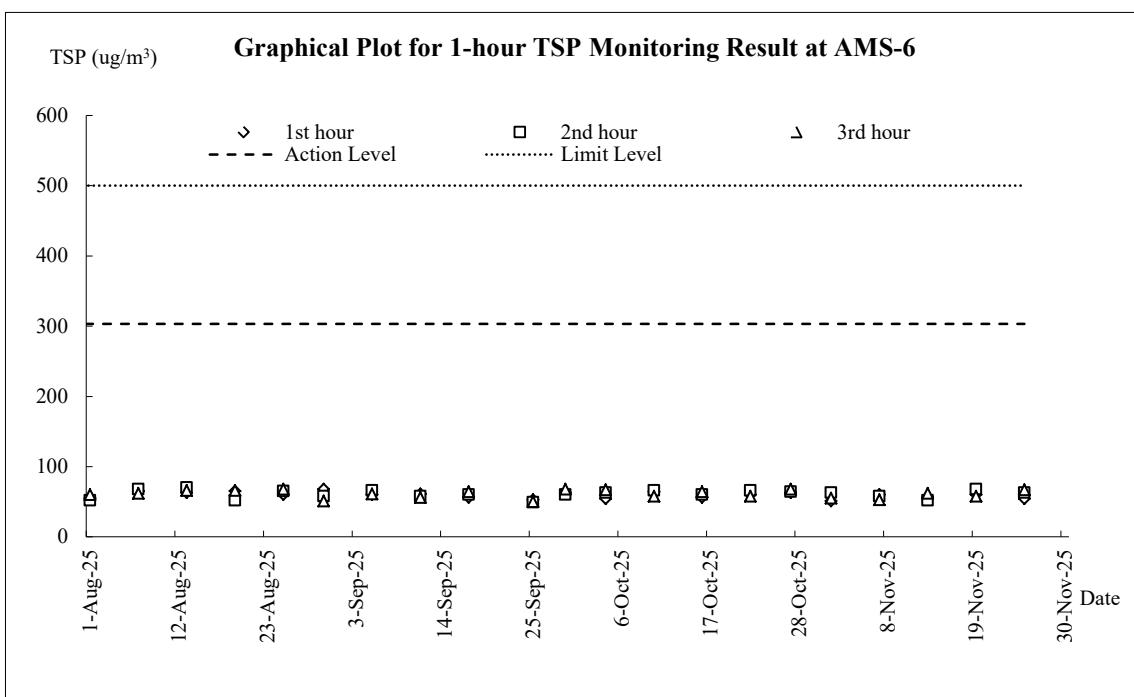
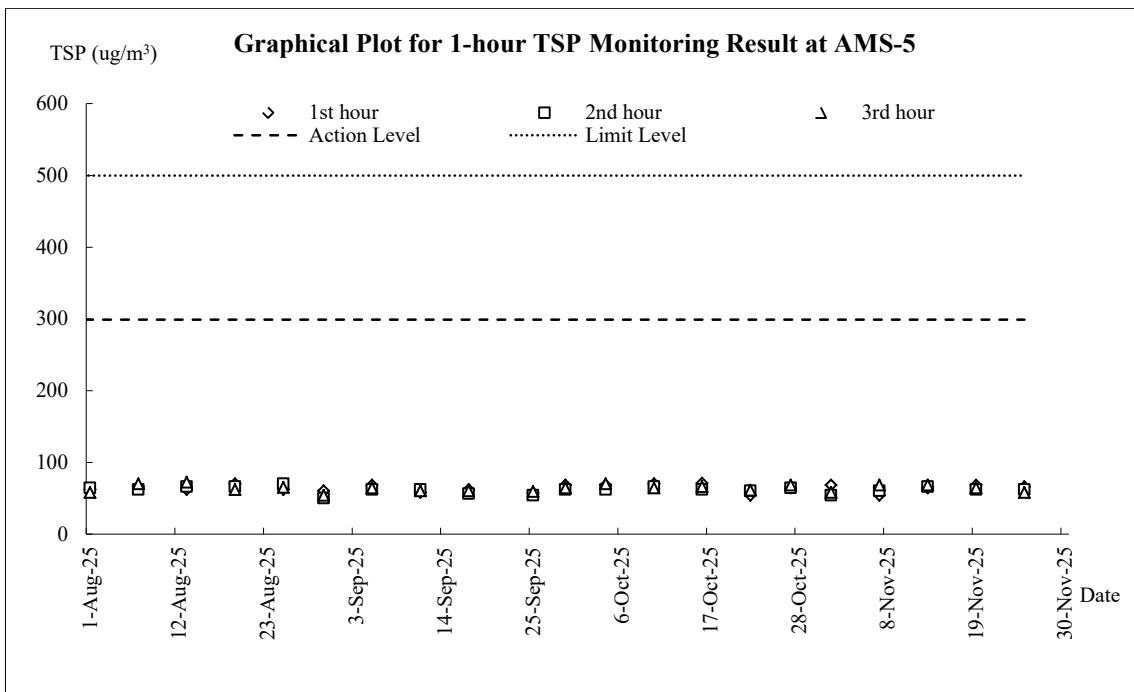
| Date | Start Time | 1st Leq (5min) | | | 2nd Leq (5min) | | | 3rd Leq (5min) | | | 4th Leq (5min) | | | 5th Leq (5min) | | | 6th Leq (5min) | | | Leq30min, dB(A) | Limit Level dB(A) |
|-----------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|-----------------|-------------------|
| | | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | Leq, dB(A) | L10, dB(A) | L90, dB(A) | | |
| 7-Nov-25 | 9:00 | 60.5 | 62.9 | 59.5 | 61.2 | 63.7 | 58.7 | 65.6 | 67.1 | 63.7 | 62.3 | 64.5 | 57.0 | 61.3 | 63.4 | 57.3 | 60.8 | 64.4 | 56.8 | 62 | 75 |
| 13-Nov-25 | 9:00 | 60.2 | 63.0 | 57.1 | 64.0 | 66.9 | 57.5 | 63.3 | 65.2 | 54.2 | 59.8 | 63.2 | 56.0 | 64.4 | 67.5 | 55.5 | 58.9 | 62.2 | 55.8 | 62 | 75 |
| 19-Nov-25 | 9:40 | 63.6 | 66.9 | 55.2 | 65.9 | 68.5 | 63.3 | 65.6 | 67.3 | 63.8 | 66.0 | 67.3 | 64.1 | 66.1 | 67.3 | 64.6 | 65.4 | 66.8 | 64.1 | 66 | 75 |
| 25-Nov-25 | 9:00 | 61.3 | 64.2 | 55.9 | 60.4 | 62.8 | 56.1 | 63.4 | 67.3 | 54.8 | 60.7 | 63.0 | 52.6 | 63.0 | 67.1 | 54.2 | 59.6 | 62.8 | 55.2 | 62 | 75 |

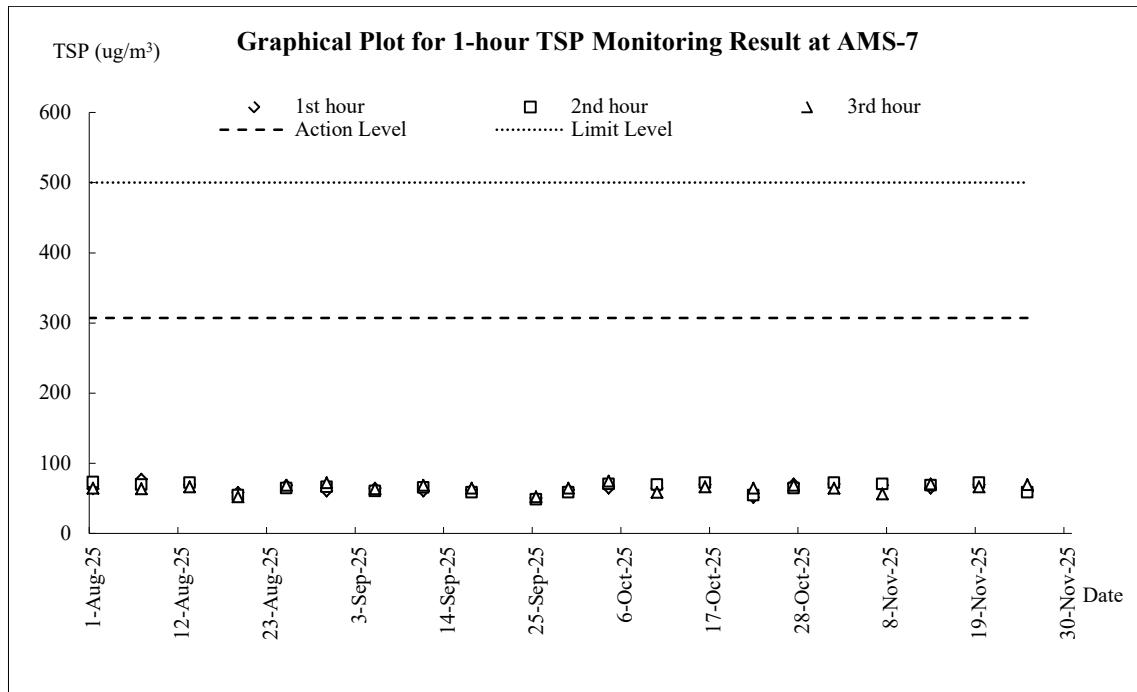
Appendix I

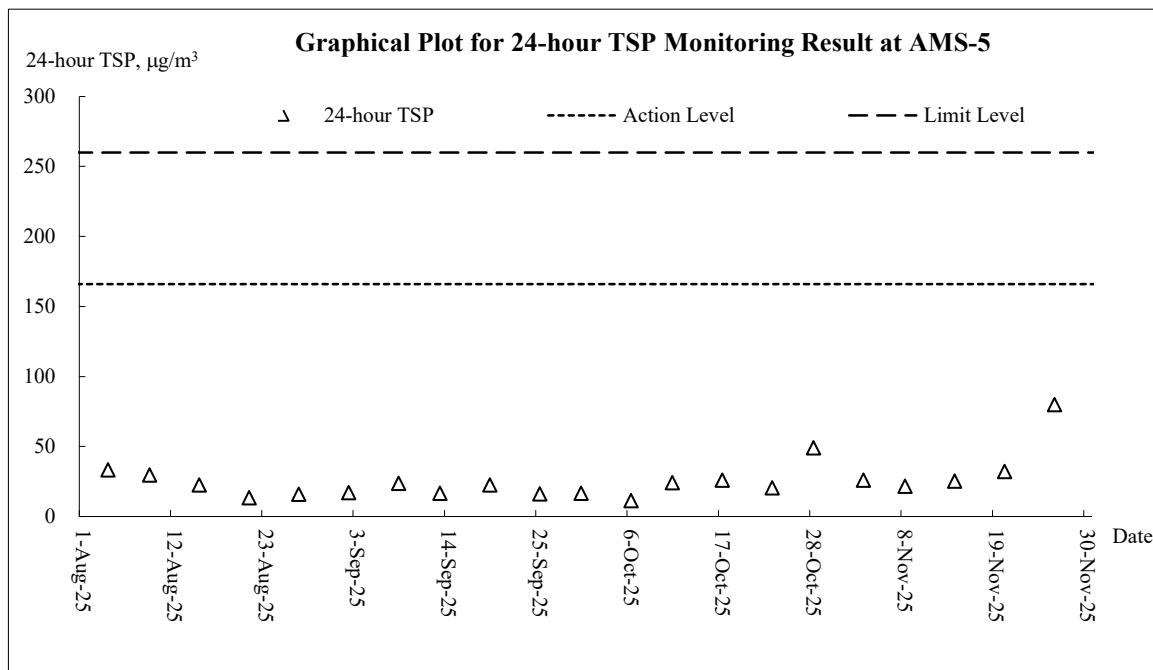
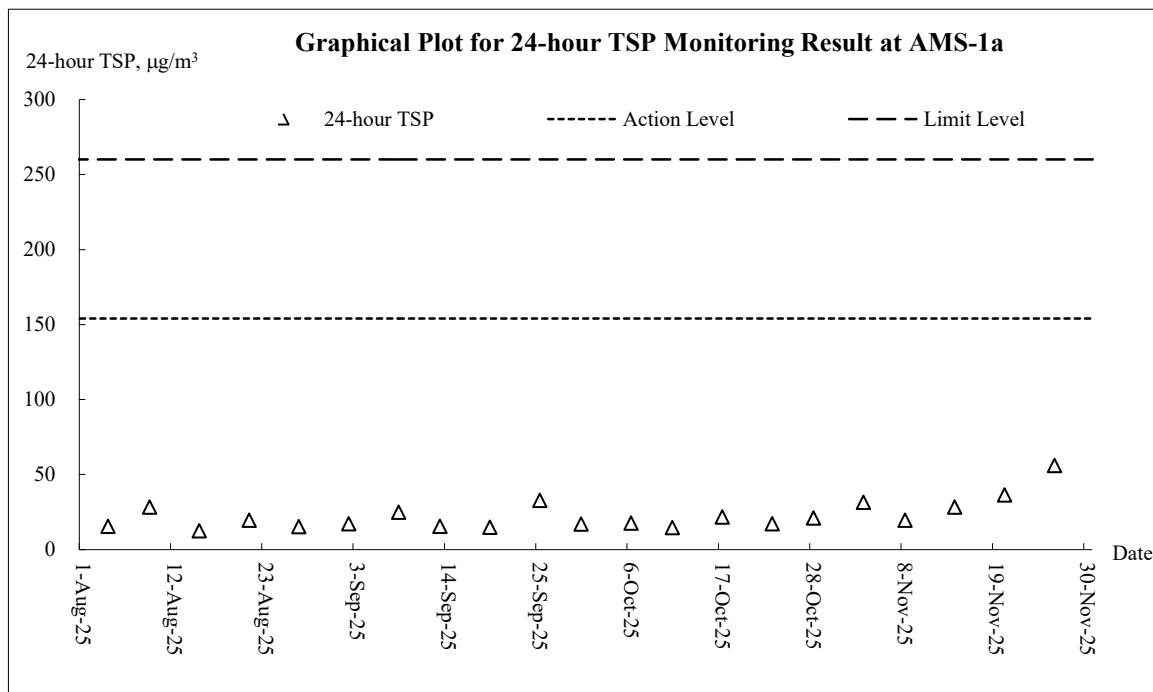
Graphical Plots for Monitoring Result

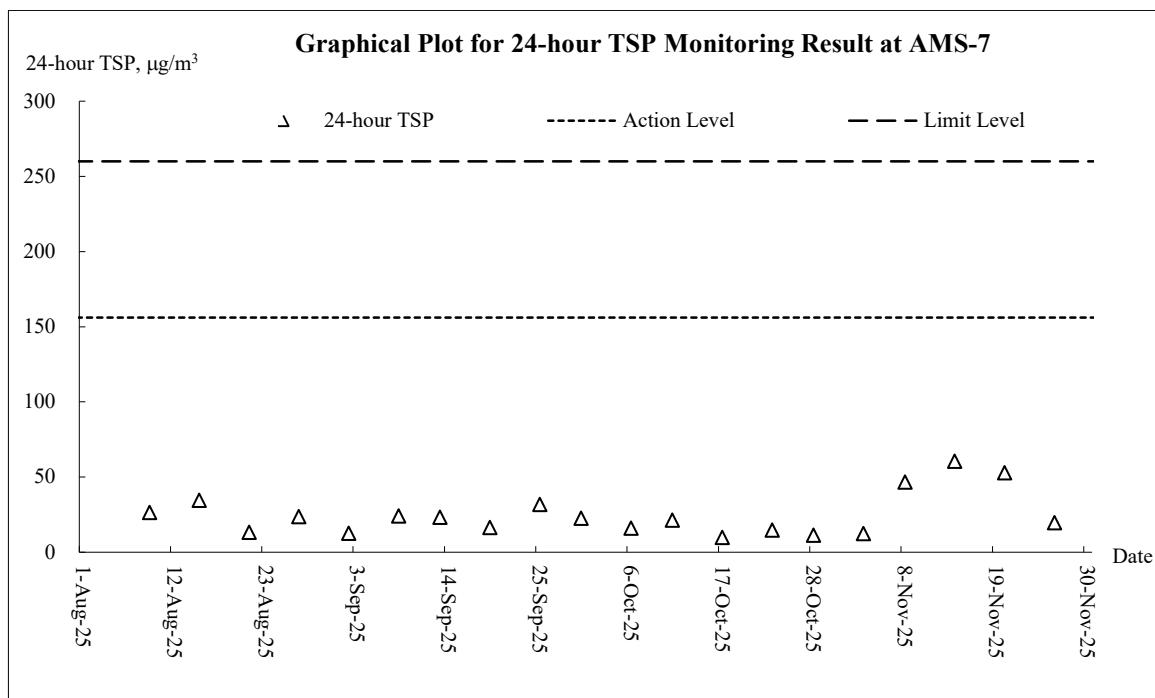
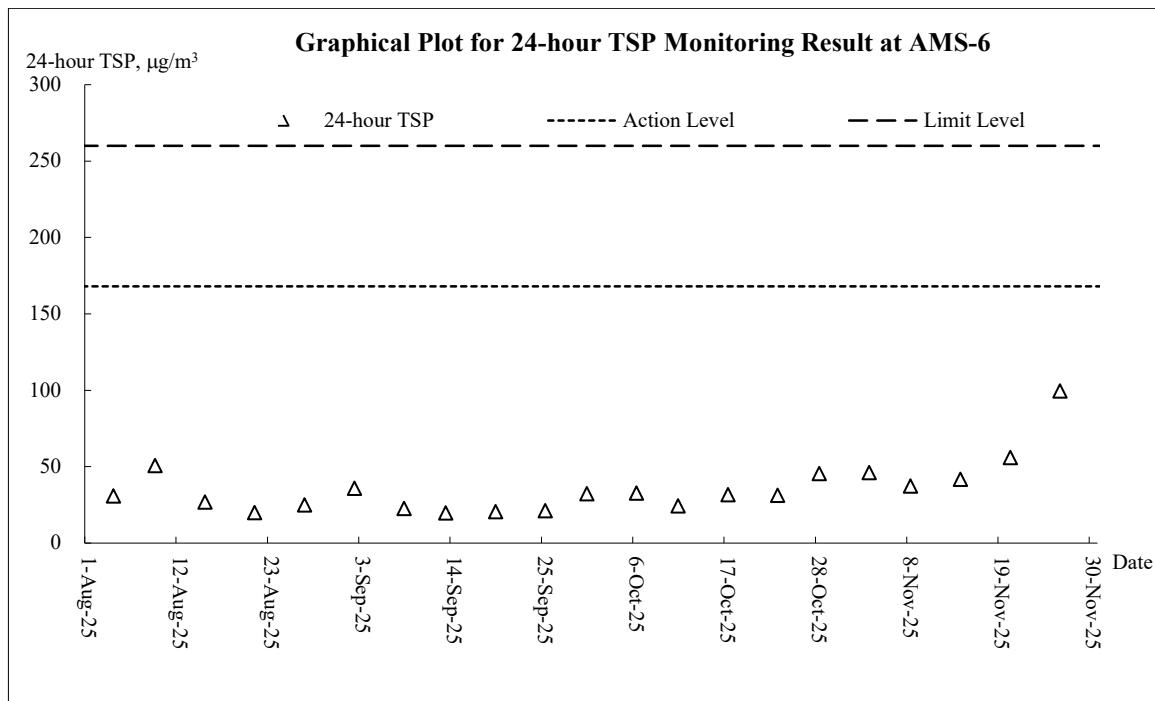
Air Quality – 1-hour TSP

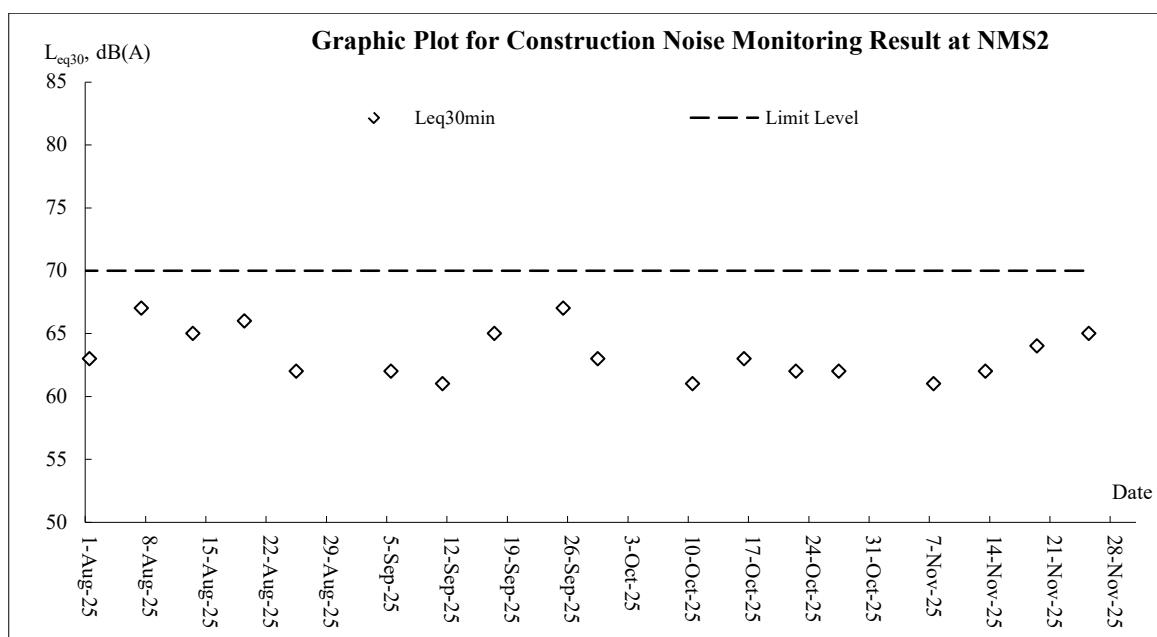
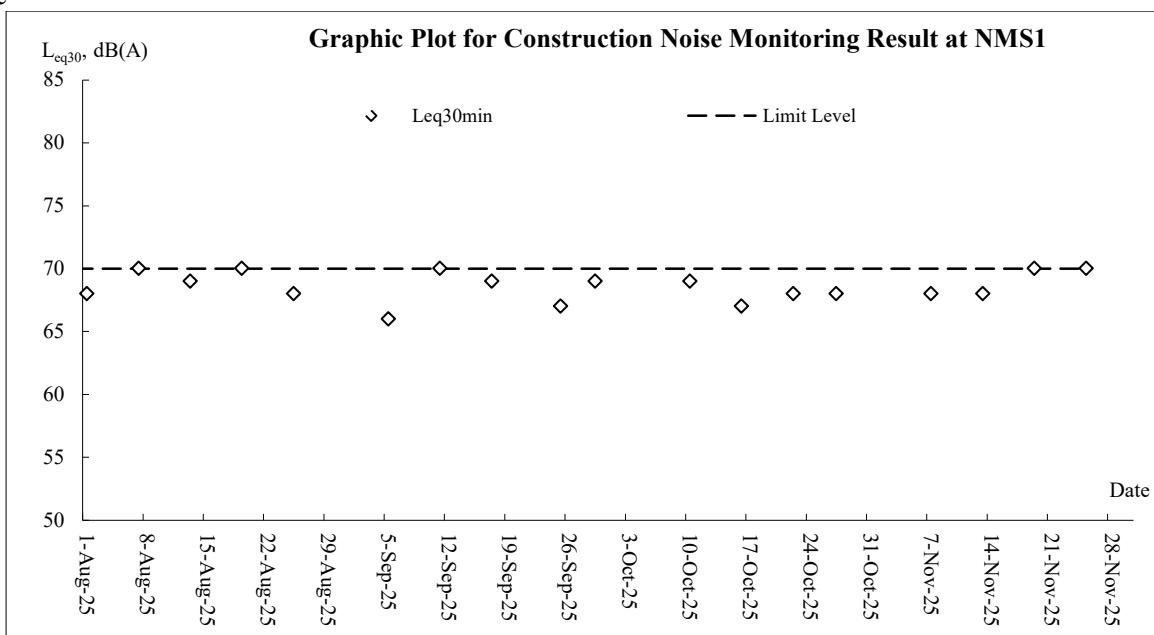


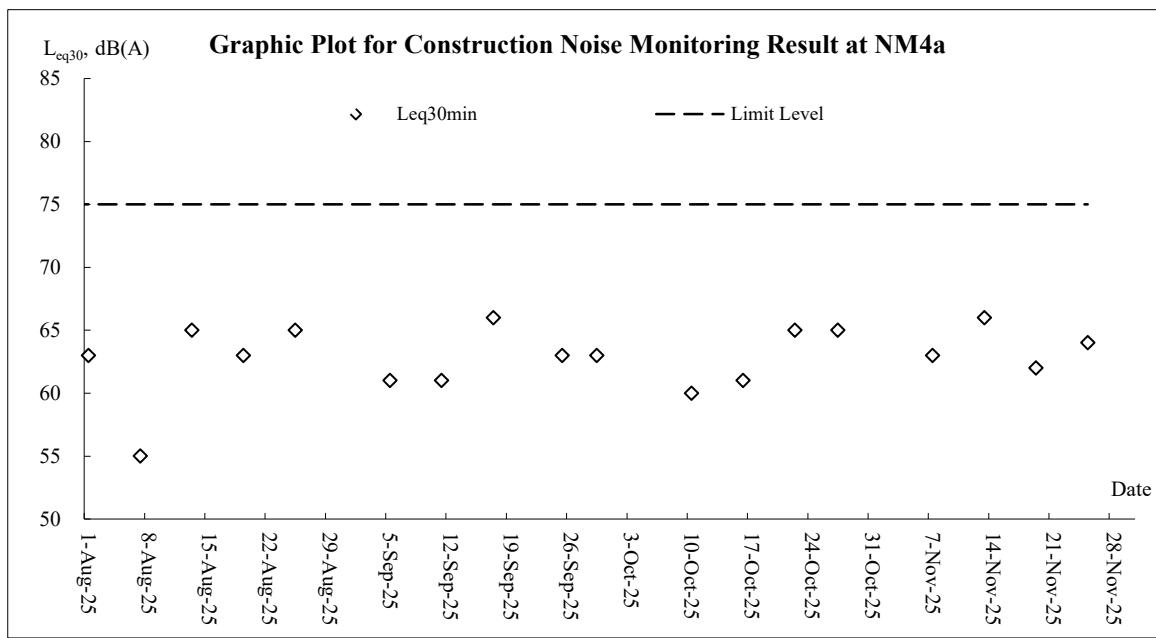
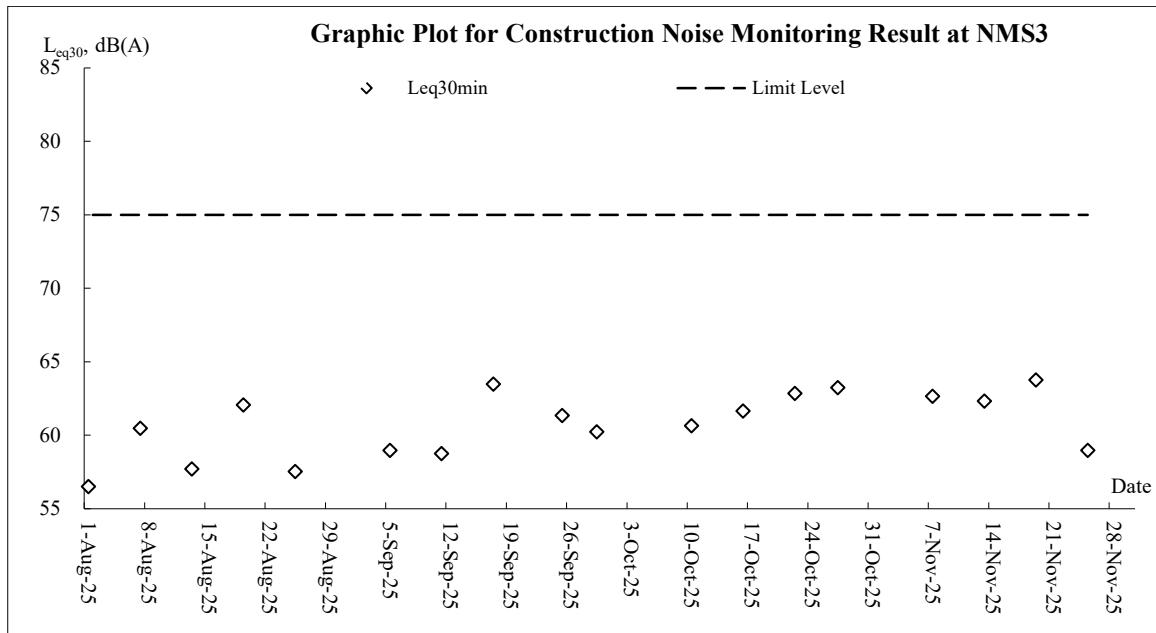


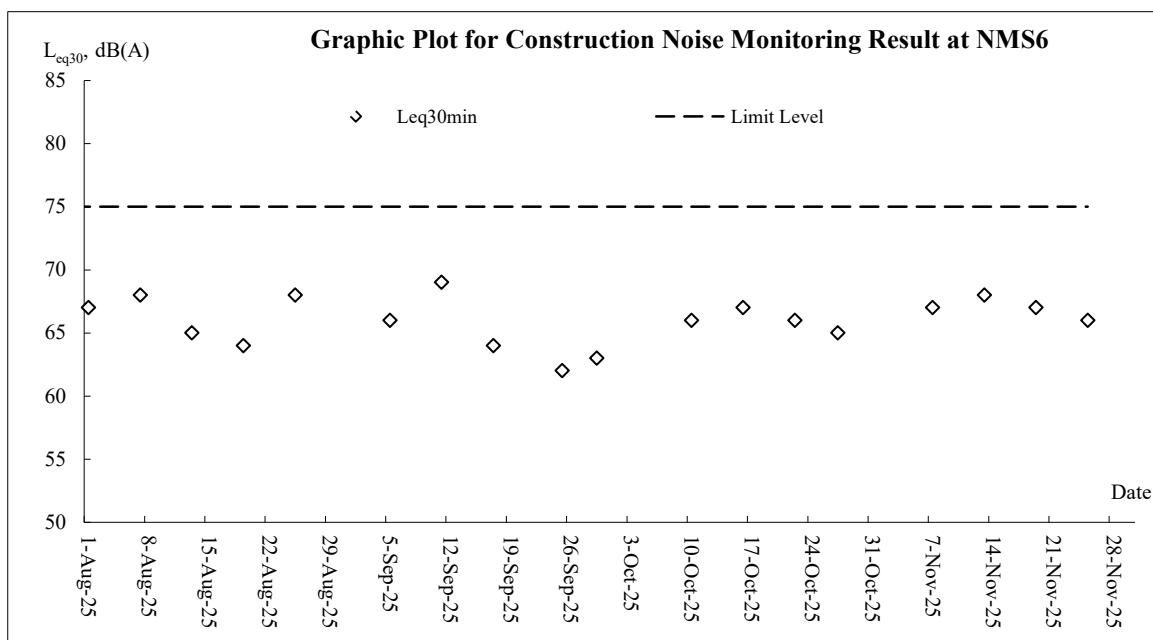
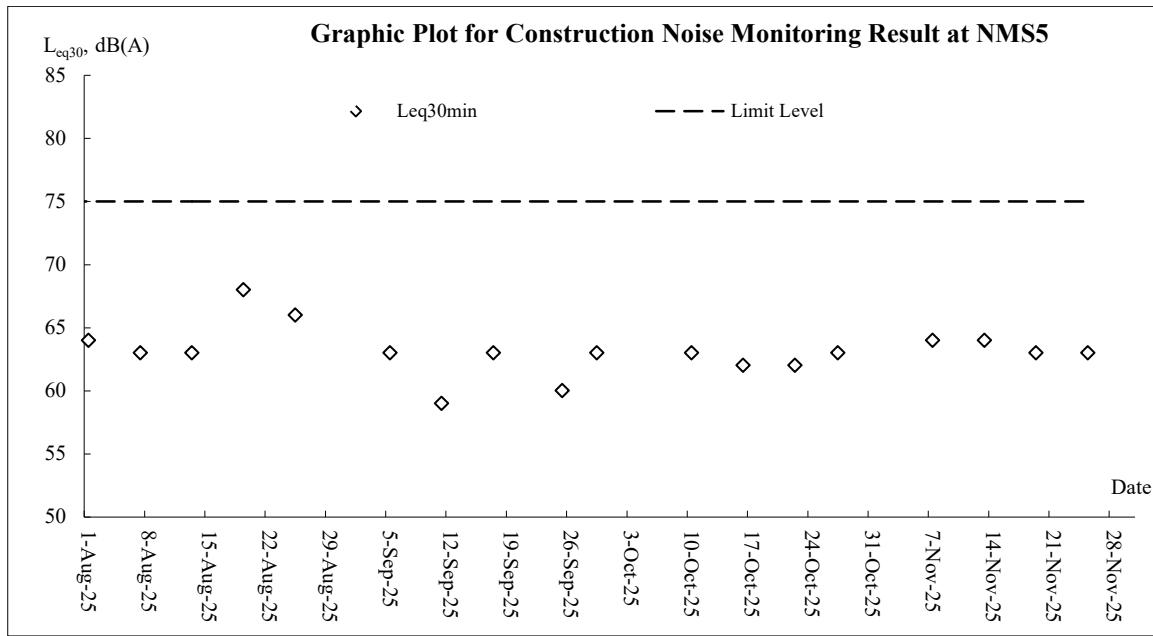


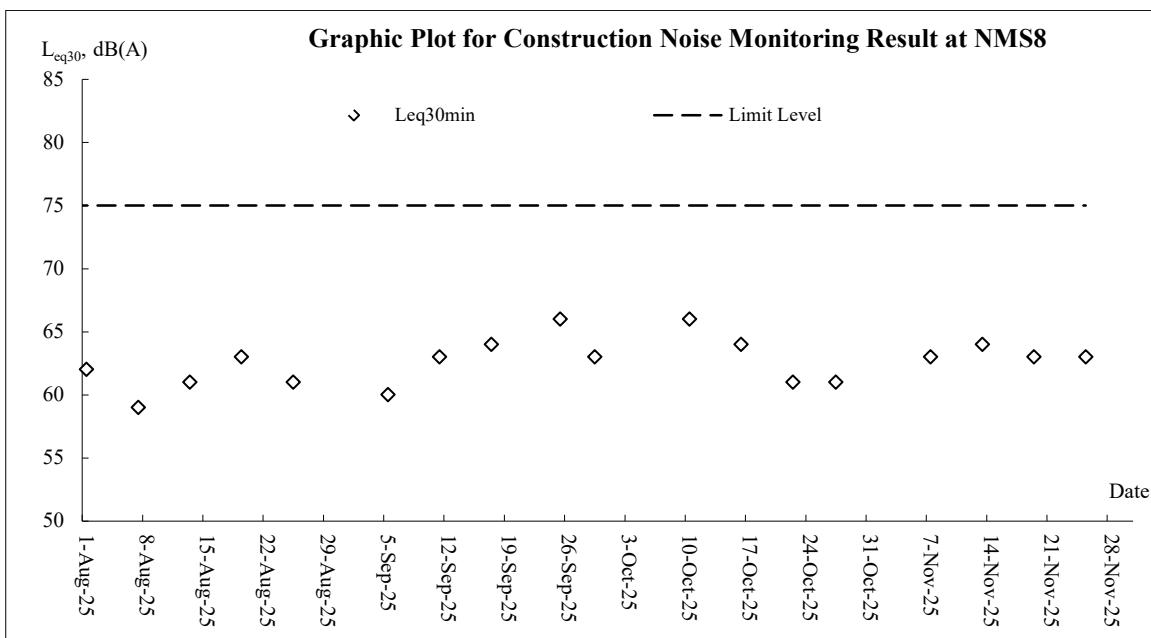
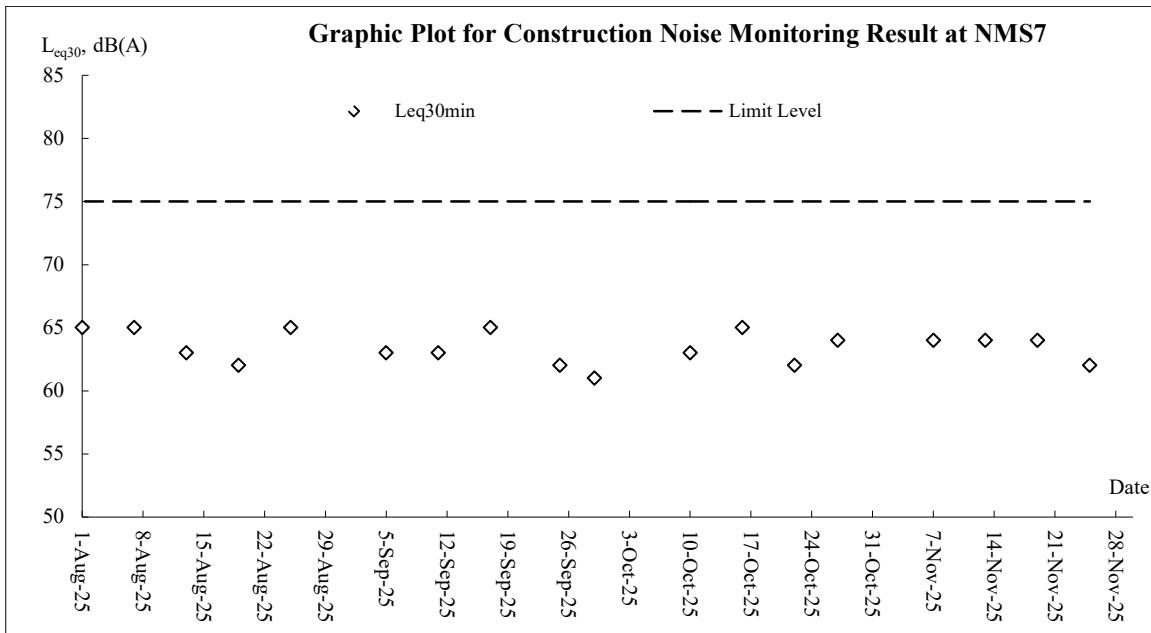
Air Quality – 24-hour TSP

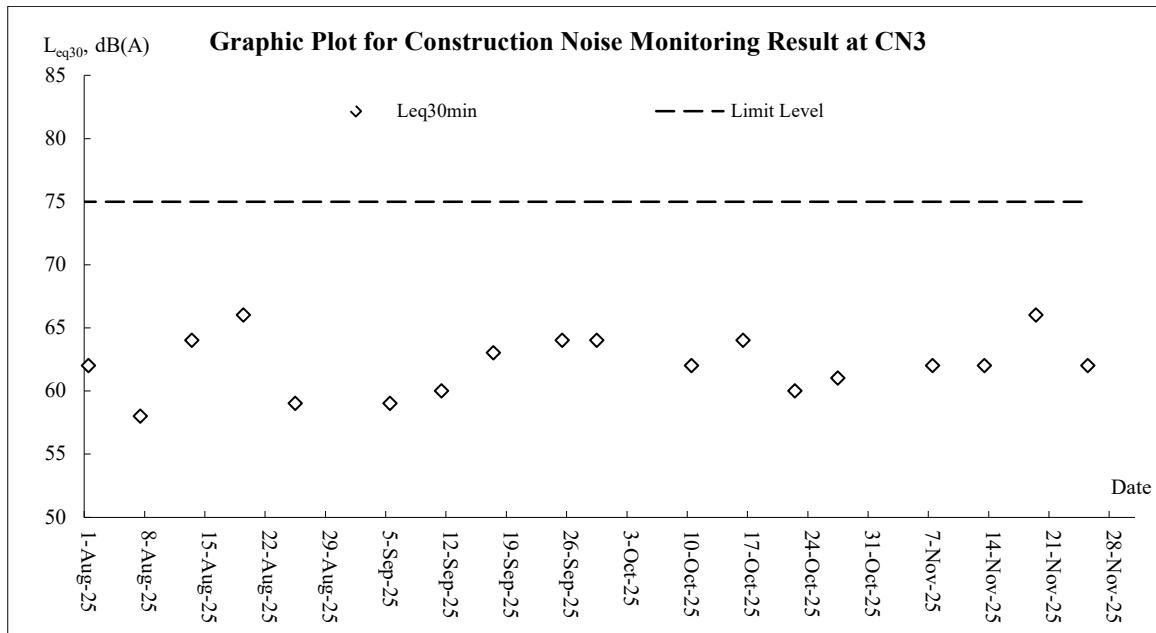


Noise









Appendix J

Meteorological Data

| Date | Weather | Total Rainfall (mm) | Kwun Tong Station | Kai Tak Station | | King's Park Station | |
|-----------|---------|--|---------------------|-------------------|----------------|----------------------------|------|
| | | | Mean Air Temp. (°C) | Wind Speed (km/h) | Wind Direction | Mean Relative Humidity (%) | |
| 1-Nov-25 | Sat | Moderate northeasterly winds. | 0 | 23.6 | 7.5 | E/SE | 63.7 |
| 2-Nov-25 | Sun | Cloudy. Moderate northeasterly winds. | 0 | 25 | 13.2 | E/SE | 60.2 |
| 3-Nov-25 | Mon | Mainly fine. Moderate northeasterly winds. | 0 | 22.4 | 12.7 | N/NE | 62.5 |
| 4-Nov-25 | Tue | Mainly fine. Moderate northeasterly winds. | Trace | 21.1 | 8.2 | NE | 70 |
| 5-Nov-25 | Wed | Moderate to fresh easterly winds | 0 | 22.9 | 11.5 | E/SE | 70.5 |
| 6-Nov-25 | Thu | Mainly cloudy with one or two rain patches. | 0.3 | 24.9 | 12 | E/SE | 70.2 |
| 7-Nov-25 | Fri | Moderate to fresh easterly winds | 5.7 | 23.7 | 22 | E/SE | 83.7 |
| 8-Nov-25 | Sat | Mainly fine. Moderate northeasterly winds. | 0 | 26 | 13 | E/SE | 75.5 |
| 9-Nov-25 | Sun | Mainly fine and dry | 0 | 26.3 | 11.5 | SE | 68 |
| 10-Nov-25 | Mon | Moderate to fresh northerly winds | 0 | 25.1 | 13.7 | W/NW | 65 |
| 11-Nov-25 | Tue | Mainly cloudy with one or two rain patches. | Trace | 22 | 15 | W/NW | 65.2 |
| 12-Nov-25 | Wed | Mainly fine and dry. | 0 | 22.6 | 15 | W/NW | 61.7 |
| 13-Nov-25 | Thu | Moderate to fresh northerly winds | 0.2 | 21.5 | 11.7 | N/NW | 64.5 |
| 14-Nov-25 | Fri | Mainly fine and dry | 0.7 | 22 | 9.2 | E/SE | 71.5 |
| 15-Nov-25 | Sat | Moderate to fresh northerly winds | 0 | 24.1 | 12.2 | E/SE | 60.5 |
| 16-Nov-25 | Sun | Mainly fine. Moderate northeasterly winds. | 0 | 24 | 13.7 | E/SE | 70.5 |
| 17-Nov-25 | Mon | Moderate to fresh easterly winds | 0 | 24.7 | 12.5 | E/SE | 70.2 |
| 18-Nov-25 | Tue | Mainly cloudy and cool. | Trace | 18 | 14.5 | N/NW | 65 |
| 19-Nov-25 | Wed | Mainly cloudy and cool. Very dry with bright | 0.1 | 14.1 | 14.2 | N/NW | 47 |
| 20-Nov-25 | Thu | Mainly fine and dry | Trace | 15.7 | 7 | N/NW | 34.5 |
| 21-Nov-25 | Fri | Moderate to fresh northerly winds | 0 | 19.7 | 7.7 | N/NE | 35.5 |
| 22-Nov-25 | Sat | Mainly cloudy and cool. Very dry with bright | 0 | 20.6 | 11.2 | E/SE | 55 |
| 23-Nov-25 | Sun | Very dry . Moderate northeasterly winds. | 0 | 23.4 | 9.5 | SE | 66 |
| 24-Nov-25 | Mon | Fine. Moderate northeasterly winds. | Trace | 24.1 | 9.5 | E/SE | 67.2 |
| 25-Nov-25 | Tue | Fine. Moderate northeasterly winds. | 0 | 21.6 | 13.2 | N/NW | 31.2 |
| 26-Nov-25 | Wed | Very dry . Moderate northeasterly winds. | 0 | 19.6 | 10.7 | E/SE | 46.7 |
| 27-Nov-25 | Thu | Mainly fine and very dry. | 0 | 19.6 | 11.5 | N/NE | 27.5 |
| 28-Nov-25 | Fri | Very dry . Moderate northeasterly winds. | 0 | 19.1 | 10.7 | N | 32 |
| 29-Nov-25 | Sat | Fine. Moderate northeasterly winds. | 0 | 20.2 | 11.7 | SE | 53 |
| 30-Nov-25 | Sun | Mainly fine and very dry. | 0 | 22.2 | 10 | E/SE | 61.7 |

Appendix K

Waste Flow Table

Contract No.: ED/2020/02

Monthly Summary Waste Flow Table for 2025

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | Actual Quantities of C&D Wastes Generated Monthly | | | | | |
|--------------|--|----------------------------------|---------------------------|---------------------------|-----------------------------|---|--------------|----------------------------|--------------|----------------|-----------------------------|
| | Total Quantity of Materials Generated | Hard Rock, Large Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fill | Imported Fill | Metals | Paper/ cardboard packaging | Plastics | Chemical Waste | Others, e.g. general refuse |
| | (in '000 m ³) | (in '000 m ³) | (in '000 m ³) | (in '000 m ³) | (in '000 m ³)** | (in '000 m ³) | (in '000 kg) | (in '000 kg) | (in '000 kg) | (in '000 kg) | (in '000 m ³)* |
| Jan | 3.641 | 0.000 | 0.000 | 0.000 | 3.641 | 0.000 | 0.000 | 0.000 | 0.000 | 0.065 | |
| Feb | 1.533 | 0.000 | 0.000 | 0.000 | 1.533 | 0.000 | 0.000 | 0.000 | 0.000 | 0.071 | |
| Mar | 1.216 | 0.000 | 0.000 | 0.000 | 1.216 | 0.000 | 0.000 | 0.000 | 0.000 | 0.099 | |
| Apr | 1.028 | 0.000 | 0.000 | 0.000 | 1.028 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | |
| May | 2.226 | 0.000 | 0.000 | 0.000 | 2.226 | 0.000 | 0.000 | 0.000 | 0.000 | 0.056 | |
| June | 3.303 | 0.000 | 0.000 | 0.000 | 3.303 | 0.000 | 0.000 | 0.000 | 0.000 | 0.068 | |
| July | 2.145 | 0.000 | 0.000 | 0.000 | 2.145 | 0.000 | 0.000 | 0.000 | 0.000 | 0.181 | |
| Aug | 3.925 | 0.000 | 0.000 | 0.000 | 3.925 | 0.000 | 0.000 | 0.000 | 0.000 | 0.032 | |
| Sep | 2.944 | 0.000 | 0.000 | 0.000 | 2.944 | 0.000 | 0.000 | 0.000 | 0.000 | 0.367 | |
| Oct | 1.457 | 0.000 | 0.000 | 0.000 | 1.457 | 0.000 | 0.000 | 0.000 | 0.000 | 0.294 | |
| Nov | 1.243 | 0.000 | 0.000 | 0.000 | 1.243 | 0.000 | 0.000 | 0.000 | 0.000 | 0.296 | |
| Dec | | | | | | | | | | | |
| Total | 24.659 | 0.000 | 0.000 | 0.000 | 24.659 | 0.000 | 0.000 | 0.000 | 0.000 | 1.574 | |

Notes: * Conversion factor for general refuse, 1 tonne = 2m³

** Conversion factor for general fill, 2 tonne = 1m³

Estimation for next month

Appendix L

Implementation Schedule for Environmental Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|--|---|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| Dust Impact (Contraction Phase) | | | | | | | | | |
| S4.7.2 to S4.7.5 | Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road is proposed to achieve dust removal efficiency of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.75 L/m ² to achieve the respective dust removal efficiencies. | Minimize dust impact at the nearby sensitive receivers | Contractor | All construction sites | V | V | V | V | V |
| S4.7.6 | The Contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction ion Dust) Regulation. | Minimize dust impact at the nearby sensitive receivers | Contractor | All construction sites | V | V | V | V | V |
| S4.7.6 | Following dust suppression measures should also be incorporated by the Contractor to control the dust nuisance throughout the construction phase: <ul style="list-style-type: none"> Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones; The load of dusty materials on a vehicle leaving a construction ion site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore; When there are open excavation and reinstatement | Minimize dust impact at the nearby sensitive receivers | Contractor | All construction sites | @ | @ | @ | @ | @ |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|--|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <p>works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction ion period.</p> <ul style="list-style-type: none"> • The port ion of any road leading only to construction ion site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; • Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; • Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet ; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; • Cement or dry PFA delivered in bulk should be stored in a closed silo fit ted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; and • Exposed earth should be properly treated by compact ion, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, | | | | | | | | |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|--|---|---|---|--|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies. | | | | | | | | |
| S4.7.7 | Implement regular dust monitoring under EM&A programme during the Construction phase. | Control construction airborne noise | Selected Representative dust monitoring station | All construction sites where practicable | V | N/A | V | N/A | N/A |
| Noise Impact (Construction Phase) | | | | | | | | | |
| S5.6.9 | Implement the following good site management practices: <ul style="list-style-type: none"> only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction ion programme; machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direct ion, where possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers on construction ion equipment should be properly fit ted and maintained during the construction ion works; mobile plant should be sited as far away from NSRs as possible and practicable; and material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. | Control construction ion airborne noise | Contractor | All construction sites where practicable | @ | V | V | @ | @ |
| S5.6.11 to S5.6.13 | Use of “Quiet” Plant and Working Methods. | Reduce the noise levels of plant items | Contractor | All construction sites where practicable | V | N/A | N/A | N/A | N/A |
| S5.6.14 | Install temporary site hoarding (approx 2.5m high) located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period. | Reduce the construction ion noise levels at low-level zone of NSRs through partial screening. | Contractor | All construction sites where practicable | V | V | V | V | V |
| S5.6.15 to S5.6.18 | Install movable noise barriers, full enclosure and acoustic mat, screen the noisy plants including air compressor and generator. | Screen the noisy plant items to be used at all construction sites | Contractor | All construction ion sites where practicable | V | V | N/A | V | N/A |
| S5.6.19 | Sequencing operation of construction plants equipment. | Operate sequentially | Contractor | All construction | V | V | N/A | N/A | N/A |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|--|--|--------------------------------|---|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | | within the same work site to reduce the construction airborne noise | | ion sites where practicable | | | | | |
| S5.6.34 | Implement temporary noise barrier along Road L4. | Further reduce the construction noise airborne noise | Contractor | Road L4 of ARQ | N/A | N/A | N/A | N/A | N/A |
| S5.6.35 | Implement a noise monitoring under EM&A programme. | Monitor the construction noise levels at the selected representative locations | Contractor | Selected Representative Noise monitoring stations | V | N/A | V | N/A | N/A |
| B | | Water Quality Impact (Construction Phase) | | | | | | | |
| S6.6.3 | <u>Construction Runoff</u> In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department , 1994 (ProPECC PN 1/94), best management practices should be implemented as far as practicable as below: <ul style="list-style-type: none"> At the start of site establishment , perimeter cut -off drains to direct off-site water around the site should be constructed with internal drainage works. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff. Sedimentation tanks with sufficient capacity, constructed from preformed individual cells of approximately 6 to 8 m³ capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped. | Control construction runoff | Contractor | All construction sites | @ | @ | @ | @ | V |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|---|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <ul style="list-style-type: none"> The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt /sediment trap. The silt /sediment traps should be incorporated in the permanent drainage channels to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction. Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means. All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas. Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities. All open stockpiles of construction material (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to | | | | | | | | |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|--|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <ul style="list-style-type: none"> prevent the washing away of construction ion materials, soil, silt or debris into any drainage system. Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction ion materials or debris being washed into the drainage system and storm runoff being directed into foul sewers. Precautions to be taken at any time of year when rainstorms are likely, act ions to be taken when a rainstorm is imminent or forecasted, and act ions to be taken during or after rainstorms are summarized in Appendix A2 of <i>PROECC PN 1/94</i>. Particular attention should be paid to the control of silty surface runoff during storm events. All vehicles and plant should be cleaned before leaving a construction ion site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction ion site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The sect ion of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient back all toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and rains. Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. Construction ion solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. | | | | | | | | |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|------------------|--|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <ul style="list-style-type: none"> • All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bounds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. • Regular environmental audit on the construction site should be carried out in order to prevent any malpractices. Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the rivers. | | | | | | | | |
| S6.6.6 and 6.6.7 | <u>Sewage from Workforce</u> <ul style="list-style-type: none"> • Portable chemical toilets should be provided for handling the construction sewage generated by the workforce. Assume that the capacity of the chemical toilets would be 0.4m³ and suck up twice a day under normal practices, around 45 chemical toilets would be required for the whole site at peak hour. And it should be noted that under normal construction periods, less chemical toilets would be needed. In addition, the total number of the chemical toilets would be subject to later detailed design, the capacity of the chemical toilets, and contractor's site practices. Nevertheless, a licensed contractor should be employed to provide appropriate and adequate portable toilets to cater around 37.5 m³/day sewage and be responsible for appropriate disposal and maintenance. Since portable chemical toilets will be provided, no adverse water quality impact from the workforce sewage is anticipated. • Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction ion phase of the Project . Regular environmental audit on the construction ion site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the Project would not cause | Handling of site sewage | Contractor | All construction sites | V | V | V | V | |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|------------------|---|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | water quality impact after undertaking all required measure | | | | | | | | |
| S6.6.8 and 6.6.9 | <u>Accidental Spillage</u> To prevent accidental spillage of chemicals, proper storage and handling facilities should be provided. All the tanks, containers and storage area should be bunded and the locations should be locked as far as possible from the sensitive watercourse and storm drains. The Contractor is required to register as a chemical waste producer if chemical wastes would be generated from the construction ion activities. Storage of chemical waste arising from the construction ion activities should be well managed with suitable labels an d warnings while disposal of those chemical wastes should be comply with the requirement states in Waste Disposal Ordinance (Cap 354) as well as Waste Disposal (Chemical Waste) (General) Regulations. | Prevention of accidental spillage | Contractor | All construction sites | @ | V | V | V | V |
| S6.6.11-S6.6.14 | <u>Groundwater from Contaminated Area</u> The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater discharge. Prior to the excavation works within these potentially contaminated areas, the groundwater quality should be reviewed during the process of discharge license application. The compliancy to the TM-DSS and the existence of prohibited substance should be confirmed after further SI. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, the contaminated groundwater should be either properly treated in compliance with TMDSS or properly recharged into the ground. If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (e.g. Petroleum Carbon Ranges (PCRs)). All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be | Minimize contaminated groundwater impacts | Contractor | All construction sites | N/A | N/A | N/A | N/A | N/A |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|---|---|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | discharged into the foul sewers. If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as PCRs should be removed as necessary by installing the petrol interceptor. | | | | | | | | |
| Waste Management (Contraction Phase) | | | | | | | | | |
| S8.5.2 | <u>Good Site Practice</u> The following good site practices are recommended throughout the construction phase activities: <ul style="list-style-type: none">• nomination of an approved personnel, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;• training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling;• provision of sufficient waste disposal points and regular collection for disposal;• appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;• regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; | Minimize generation waste during construction | Contractor | All construction sites | V | @ | V | @ | V |
| S8.5.2 (6) | The contractor should submit a Waste Management Plan | Minimize waste | Contractor | All construction | V | V | V | V | V |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|---|--|--------------------------------|--|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | (WMP) as part of the Environmental Management Plan (EMP) in accordance with the <i>ETWB TC(W) No. 19/2005</i> for construction ion phase. The EMP should be submitted to the Engineer for approval. Mitigation measures proposed in the EIA Report and the EM&A Manual should be adopted. | generation during construction | | sites | | | | | |
| S8.5.3 | <p><u>Waste Reduction Measures</u></p> <p>Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction:</p> <ul style="list-style-type: none"> • segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal; • proper storage and site practices to minimize the potential for damage and contamination of construction ion materials; • plan and stock construction ion materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste; • sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable port ions (i.e. soil, broken concrete, metal etc.); • provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling. | Reduce waste generation | Contractor | All construction sites where practicable | V | V | V | V | V |
| S8.5.5 | <p><u>Storage of Waste</u></p> <p>The following recommendation should be implemented to minimize the impacts:</p> <ul style="list-style-type: none"> • waste such as soil should be handled and stored well to ensure secure containment ; • stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; • different locations should be designated to stockpile each material to enhance reuse; | Minimize waste impacts from storage | Contractor Contractor | All construction sites | V | V | V | V | V |
| S8.5.6 | <p><u>Collection and Transportation of Waste</u></p> <p>The following recommendation should be implemented to minimize the impacts:</p> | Minimize waste impacts from storage | Contractor | All construction sites | V | @ | V | @ | @ |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|---|--|--------------------------------|---|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <ul style="list-style-type: none"> remove waste in timely manner; employ the trucks with cover or enclosed containers for waste transportation; obtain relevant waste disposal permits from the appropriate authorities; and disposal of waste should be done at licensed waste disposal facilities. | | | | | | | | |
| S8.5.8 | <p><u>Excavated and C&D Material</u></p> <p>Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at public filling areas or reclamation sites. The following mitigation measures should be implemented in handling the excavated and C&D materials:</p> <ul style="list-style-type: none"> maintain temporary stockpiles and reuse excavated fill material for backfilling; carry out on-site sorting; make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; implement a recording system for the amount of waste generated, recycled and disposed of for checking; <p>The recommended C&D materials handling should include:</p> <ul style="list-style-type: none"> On-site sorting of C&D materials Reuse of C&D materials Use of Standard Formwork and Planning of Construction Materials purchasing Provision of wheel wash facilities | Minimize waste impacts from excavated and C&D materials | Contractor | All construction sites | V | V | V | V | V |
| S8.5.15 | <p><u>Contaminated Soil</u></p> <p>As a precaution, it is recommended that standard good site practice should be implemented during the construction phase to minimize any potential exposure to contaminated soils or groundwater. The details of mitigation measures to minimize the potential environmental implications arising from the handling of contaminated materials refer to Land Contamination Section.</p> | Remediate contaminated soil | Contractor | All construction sites where applicable | V | V | N/A | N/A | N/A |
| S8.5.17 | <u>Chemical Waste</u> | Control the chemical | Contractor | All construction | V | V | V | V | V |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-------------------------------------|--|--|--|--|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <ul style="list-style-type: none"> If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producer. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. | waste and ensure proper storage, handling and disposal. | | sites | | | | | |
| S8.5.18 | <u>General Waste</u> <ul style="list-style-type: none"> General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling. Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean. A reputable waste collector should be employed to remove general refuse on a daily basis. | Minimize production of the general refuse and avoid odour, pest and litter impacts | Contractor | All construction sites | @ | V | V | V | @ |
| S8.5.19 | <u>Sewage</u> <ul style="list-style-type: none"> The WMP should document the locations and number of portable chemical toilets depending on the number of workers, land availability, site condition and activities. Regularly collection by licensed collectors should be arranged to minimize potential environmental impacts. | Minimize production of sewage impacts | Contractor | All construction sites | V | V | V | V | V |
| Ecology (Construction Phase) | | | | | | | | | |
| S. 10.7.2 to 10.7.6 | Re-provision of Wooded Area for ecological function at the future Quarry Park. | Compensate for the loss of three woodland patches of a total area of about 1.13ha. | Contractor/ Detailed Design Consultant (qualified botanist / horticulturist / Certified Arborist to supervise the planting). | Northern part of the proposed Quarry Park. | N/A | N/A | N/A | N/A | N/A |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|-----------|---|--|--------------------------------|-------------------------|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| .10.7.10 | <p>Construction phase in situ mitigation measures to minimize impacts on hydrological condition and water quality of hillside watercourses include:</p> <ul style="list-style-type: none"> Temporary sewerage and drainage will be designed and installed to collect wastewater and prevent it from entering nearby watercourses; Proper locations well away from nearby watercourses will be used for temporary storage of materials (i.e. equipment, fill materials, chemicals and fuel) and temporary stockpile of construction debris and spoil, and these will be identified before commencement of works; To prevent muddy water entering nearby watercourses, work sites close to nearby watercourses will be isolated, using such items as sandbags or silt curtains with lead edge at bot tom and properly supported props. Other protective measures will also be taken to ensure that no pollution or siltation occurs to the water gathering grounds of the works site; Stockpiling of construction materials, if necessary, will be properly covered and located away from nearby watercourses; Erection of temporary geotextile silt fences will be carried out around earth-moving works to trap any sediments and prevent them from entering watercourses; Construction debris and spoil will be covered and/or properly disposed as soon as possible to avoid being washed into nearby watercourses; Exposed soil will be covered as quickly as possible following format ion works, followed, where appropriate, by covering with biodegradable geotextile blanket for erosion control purposes; Where appropriate, earth-bunding will be carried out of areas where soils have been disturbed or where vegetation has been cleared, to ensure that surface runoff will not move soils off-site; Construction ion effluent, site run-off and sewage will be probably collected and/or treated. Wastewater from any construction ion site will be | Minimize impacts on Hydrological condition and water quality of hillside watercourses. | Contractor | All construction sites | V | N/A | V | V | N/A |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|--|---|--|--------------------------------|---|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| | <p>minimised via the following in descending order: reuse, recycling and treatment;</p> <ul style="list-style-type: none"> Proper locations for discharge outlets of wastewater treatment facilities well away from sensitive receivers will be identified and used; Silt traps will be installed at points where drainage from the site enters local watercourses; Appropriate sanitary facilities for on-site workers will be provided; The site boundary will be clearly marked and any works beyond the boundary strictly prohibited, and Regular water monitoring and site audit will be carried out at suitable points. If the monitoring and audit results show that pollution occurs, adequate measures including temporary cessation of works will be considered. | | | | | | | | |
| S.10.7.11 | <p>Implement an emergency contingency plan during the construction phase and the plan will include, but not be limited to, the following:</p> <ul style="list-style-type: none"> Potential emergency situations; Chemicals or hazardous materials used on-site (and their location); Emergency response team; Emergency response procedures; List of emergency telephone hot lines; Locations and types of emergency response equipment, and Training plan and testing for effectiveness. | Minimize impacts on Hydrological condition and water quality of hillside watercourses. | Contractor | All construction sites | N/A | N/A | N/A | N/A | N/A |
| Landscape and visual (Construction Phase) | | | | | | | | | |
| S11.14.23, Table 11.9, CM1 [4] | All existing trees to be retained shall be carefully protected during construction. | Avoid disturbance and protection of the existing trees | Detailed Design Consultant / | The whole project area where applicable | V | V | @ | V | @ |
| S11.14.23, Table 11.9, CM2 [3] | Tree Transplantation - Should removal of trees be unavoidable due to construction impacts, trees will be transplanted or felled. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with <u>LAO GN No. 7/2007, ETWB TCW No. 29/2004</u> and <u>10/2013</u> . Final locations of transplanted trees shall be agreed prior to commencement of the work. | Minimize landscape impact and retention of landscape resources | Detailed Design Consultant / | Onsite where possible. Otherwise consider offsite locations | * | N/A | N/A | V | V |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | Implementation Status | | | | |
|--------------------------------|--|--|--------------------------------|---|-----------------------|------------|------------|------------|------------|
| | | | | | Contract 1 | Contract 2 | Contract 3 | Contract 4 | Contract 5 |
| S11.14.23, Table 11.9, CM3 [4] | Control of operation night -time glare with well-planned lighting operation system to minimize potential glare impact to adjacent VSRs | Minimize glare impact to adjacent VSRs | Contractor/ CEDD | The whole project area where applicable | V | V | @ | V | N/A |
| S11.14.23, Table 11.9, CM [4] | Erection of decorative screen hoarding. | Minimize visual impact | Contractor/ CEDD | The whole project area where applicable | N/A | N/A | N/A | N/A | N/A |
| S11.14.23, Table 11.9, CM5 [2] | Minimise disturbance and limitation of run-off – temporary structures and construction works should be planned with care to minimize disturbance to adjacent landscape, vegetation, natural stream habitats. | Minimize visual impact | Contractor/ CEDD | The whole project area where applicable | V | V | V | V | N/A |

Legend: V = implemented; x = not implemented; @ = partially implemented; * = pending to be implemented; N/A = not applicable

Appendix M

Complaint Log

Appendix M1 Cumulative Complaint and Summons/ prosecution

| Reporting Month | Number of Complaints in Reporting Month | Number of Summons/ Prosecution in Reporting Month |
|------------------------|--|--|
| March 2017 | 1 | 0 |
| April 2017 | 0 | 0 |
| May 2017 | 0 | 0 |
| June 2017 | 2 | 0 |
| July 2017 | 3 | 0 |
| August 2017 | 3 | 0 |
| September 2017 | 4 | 0 |
| October 2017 | 2 | 0 |
| November 2017 | 3 | 0 |
| December 2017 | 3 | 0 |
| January 2018 | 1 | 0 |
| February 2018 | 4 | 0 |
| March 2018 | 0 | 0 |
| April 2018 | 2 | 0 |
| May 2018 | 1 | 0 |
| June 2018 | 1 | 0 |
| July 2018 | 0 | 0 |
| August 2018 | 1 | 0 |
| September 2018 | 1 | 0 |
| October 2018 | 1 | 0 |
| November 2018 | 3 | 0 |
| December 2018 | 2 | 0 |
| January 2019 | 2 | 0 |
| February 2019 | 3 | 0 |
| March 2019 | 1 | 0 |
| April 2019 | 0 | 0 |
| May 2019 | 0 | 0 |
| June 2019 | 1 | 0 |
| July 2019 | 1 | 0 |
| August 2019 | 1 | 0 |
| September 2019 | 0 | 0 |
| October 2019 | 1 | 0 |
| November 2019 | 4 | 0 |
| December 2019 | 0 | 0 |
| January 2020 | 0 | 0 |
| February 2020 | 0 | 0 |
| March 2020 | 4 | 0 |
| April 2020 | 1 | 0 |
| May 2020 | 1 | 0 |
| June 2020 | 1 | 0 |
| July 2020 | 0 | 0 |
| August 2020 | 0 | 0 |
| September 2020 | 0 | 0 |
| October 2020 | 0 | 0 |
| November 2020 | 1 | 0 |
| December 2020 | 2 | 0 |
| January 2021 | 1 | 0 |
| February 2021 | 0 | 0 |
| March 2021 | 2 | 0 |

| | | |
|----------------|---|---|
| April 2021 | 1 | 0 |
| May 2021 | 0 | 0 |
| June 2021 | 1 | 0 |
| July 2021 | 1 | 0 |
| August 2021 | 0 | 0 |
| September 2021 | 2 | 0 |
| October 2021 | 0 | 0 |
| November 2021 | 0 | 0 |
| December 2021 | 0 | 0 |
| January 2022 | 0 | 0 |
| February 2022 | 0 | 0 |
| March 2022 | 1 | 0 |
| April 2022 | 1 | 0 |
| May 2022 | 3 | 0 |
| June 2022 | 2 | 0 |
| July 2022 | 0 | 0 |
| August 2022 | 2 | 0 |
| September 2022 | 1 | 0 |
| October 2022 | 1 | 0 |
| November 2022 | 0 | 0 |
| December 2022 | 0 | 0 |
| January 2023 | 0 | 0 |
| February 2023 | 0 | 0 |
| March 2023 | 0 | 0 |
| April 2023 | 0 | 0 |
| May 2023 | 1 | 0 |
| June 2023 | 0 | 0 |
| July 2023 | 1 | 0 |
| August 2023 | 0 | 0 |
| September 2023 | 0 | 0 |
| October 2023 | 0 | 0 |
| November 2023 | 0 | 0 |
| December 2023 | 0 | 0 |
| January 2024 | 1 | 0 |
| February 2024 | 0 | 0 |
| March 2024 | 0 | 0 |
| April 2024 | 1 | 0 |
| May 2024 | 2 | 0 |
| June 2024 | 0 | 0 |
| July 2024 | 0 | 0 |
| August 2024 | 0 | 0 |
| September 2024 | 1 | 0 |
| October 2024 | 0 | 0 |
| November 2024 | 0 | 0 |
| December 2024 | 1 | 0 |
| January 2025 | 1 | 0 |
| February 2025 | 1 | 0 |
| March 2025 | 0 | 0 |
| April 2025 | 0 | 0 |
| May 2025 | 0 | 0 |

| | | |
|-----------------------|-----------|----------|
| June 2025 | 0 | 0 |
| July 2025 | 0 | 0 |
| August 2025 | 0 | 0 |
| September 2025 | 0 | 0 |
| October 2025 | 0 | 0 |
| November 2025 | 0 | 0 |
| Overall Total | 91 | 0 |

Appendix M2 Complaint Log

| Log ref. | Date of Complainant | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|---------------------|------------------------|--|---------------------------|--------------------|--------------|----------|---|---|----------------------------------|-----------------------|
| 1 | 23-Mar-17 | 8-Jun-17 | On Tat Estate | Resident of On Tat Estate | Construction noise | SPRO hotline | NA | A resident living in On Tat House reported that some night works with noise and flashing caused nuisance to nearby resident after 11:00 pm on 23 March 2017. | According the incident report conducted by the CWSTVJV, demobilization of crawler crane was undertaken on 23 March 2017 11pm and it is TD requirement to carry out demobilization of heavy machine at nighttime. It is considered this complaint was a single incident and would not be happened again in future. | no comment by IEC on 11 Oct 2017 | TCS00864/16/300/F0087 |
| 2 | 28-Jul-17 | 28-Jul-17 | 38/F of Yin Tat House (賢達樓), On Tat Estate | Resident of On Tat Estate | Construction noise | SPRO hotline | NA | Mr. Hsu received a complaint from a resident living in the flat on 38/F of Yin Tat House (賢達樓), On Tat Estate. The resident complained about the noise level of our works during daytime. | Noise monitoring by Contractor was conducted in Yin Tat House, On Tat Estate, at around 2 pm on 28-Jul-2017. Another noise monitoring was carried out by ET (AUES) and representatives of AECOM and JV in the presence of the complainant in her flat at 10 am on 1-Aug-2017 and was witnessed by Mr. Hsu. No exceedance of noise was recorded. The complainant was satisfied about the monitoring results. | no comment by IEC on 9 Aug 2017 | TCS00864/16/300/F0060 |
| 3 | 29-Aug-17 | 29-Aug-17 | Shing Tat House 24/F | Resident of On Tat Estate | Construction noise | SPRO hotline | NA | Mr. Hsu Yau Wai (Tel no.9519 5663) reported that he received complaint from a resident (Ms Cheng) living at Shing Tat House 24/F Room 22 about the noise generated from our site this week. The noise heard was mainly rock breaking noise from our site. | Noise monitoring was carried out by ET (AUES) and representatives of AECOM and JV in the presence of the complainant in her flat at 3pm on 30-Aug-2017. No exceedance of noise was recorded. The complainant was satisfied about the monitoring results. | no comment by IEC on 8 Sep 2017 | TCS00864/16/300/F0081 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|------------------------------|---------------------------|---------------------------|---------|-------------------------------|---|--|---------------------------------|-----------------------|
| 4 | 21-Jun-17 | 29-Aug-17 | Tat Yan House, Po Tat Estate | Resident of Po Tat Estate | Construction noise | EPD | EPD (ref.N08/RE/00019373-17) | day time construciton noise of breakers (8am to 6pm) | Since these two complaints were forwarded by CEDD to ET on 31 August 2017 which way after the complaint dates. Investigation would be conducted based on the site information by the Contractor of Contract 1 - NE/2016/01 (CWSTVJV) as well as the observation during weekly site inspection carried out ET during June 2017. In our investigation, CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident and the working hour 08:00 to 18:00 did not breach any legal requirement. To eliminate the inconvenience caused to the nearby resident CWSTVJV was advised to further enhance the noise mitigation measures as appropriately. | no comment by IEC on 3 Nov 2017 | TCS00864/16/300/F0093 |
| 5 | 22-Jun-17 | 29-Aug-17 | Tat Yan House, Po Tat Estate | Resident of Po Tat Estate | Dust & Construction noise | EPD | EPD (ref. N08/RE/00019428-17) | Day time construction noise of breakers (8AM to 6PM). Requested to delay the operating hour of breakers to 10AM or 11AM | CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident and the working hour 08:00 to 18:00 did not breach any legal requirement. To eliminate the inconvenience caused to the nearby resident CWSTVJV was advised to further enhance the noise mitigation measures as appropriately. | | |
| 6 | 15-Jul-17 | 29-Aug-17 | Tat Yi House, Po Tat Estate | Resident of Po Tat Estate | Construction noise | EPD | EPD (ref.N08/RE/00022479-17) | Construction noise | CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident and the working hour 08:00 to 18:00 did not breach any legal requirement. To eliminate the inconvenience caused to the nearby resident, CWSTVJV was advised to further enhance the noise mitigation measures as appropriately. | no comment by IEC on 3 Nov 2017 | TCS00864/16/300/F0094 |
| 7 | 28-Jul-17 | 29-Aug-17 | Anderson Road | unknown | Dust | EPD | EPD (ref.N08/RE/00023986-17) | Poor control on dust emission at Anderson Road Construction Site | CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident and status of the implementation of dust mitigation measures was considered effective based on the site observation. | | |

| Log ref. | Date of Complainant | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|---------------------|------------------------|-----------------------------------|---------------------------------|--------------------|--------------|------------------------------|---|---|----------------------------------|-----------------------|
| 8 | 2-Aug-17 | 29-Aug-17 | Chun Tat House, On Tat Estate | Resident of On Tat Estate | Construction noise | EPD | EPD (ref.N08/RE/00024557-17) | Day time construction noise of breakers (8AM to 6PM) | CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in August 2017, there were no breaches of EM&A requirement. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should further enhance the noise mitigation measures as appropriately. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 15 Nov 2017 | TCS00864/16/300/F0098 |
| 9 | 19-Sep-17 | 19-Sep-17 | Sau Mau Ping Estate Sau Nga House | Resident of Sau Mau Ping Estate | Construction noise | SPRO hotline | NA | The complainant is living at Sau Mau Ping Estate Sau Nga House (秀雅樓) 38/F. He complained about the noise nuisance recently from August to September especially during night time after 12:00 am, even in Saturdays and Sundays. The noise nuisance caused a great disturbance to him. He made a request to conduct investigation about the source of the noise during night time. | ET has conducted an ad-hoc noise measurement for Leq (30min) on the rooftop of 秀雅樓 and 秀義樓 in the afternoon of 22 September 2017. (Photo 1 & 2) During the course of noise measurement, construction activities such as excavation and breaking were conducted in the Quarry Site. The measurement results taken at both 秀雅樓 and 秀義樓 were 63dB(A) which below the Limit Level under the EM&A Programme. | no comment by IEC on 18 Oct 2017 | TCS00864/16/300/F0088 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---|---------------------------------|--------------------|---------|--------------------------------|--|--|----------------------------------|-----------------------|
| 10 | 21-Sep-17 | 13-Oct-17 | Sau Mau Ping Estate Sau Nga House and Sau Yee House | Resident of Sau Mau Ping Estate | Construction noise | EPD | EPD (ref.N08/RE/0003 1074-17) | On 21 September 2017, the same complainant further reported that the noise can be heard at both Sau Yee House and Sau Nga House even in daytime and he strongly requested the Contractor to follow up the case immediately. | ET has conducted an ad-hoc noise measurement for Leq (30min) on the rooftop of 秀雅樓 and 秀義樓 in the afternoon of 22 September 2017. (Photo 1 & 2) During the course of noise measurement, construction activities such as excavation and breaking were conducted in the Quarry Site. The measurement results taken at both 秀雅樓 and 秀義樓 were 63dB(A) which below the Limit Level under the EM&A Programme. | | TCS00864/16/300/F0088 |
| 11 | 27-Sep-17 | 13-Oct-17 | Chun House, Tat Estate | Resident of On Tat Estate | Construction noise | EPD | EPD (ref.N08/RE/0002 9489-17) | The complainant questioned why there were 6 to 7 breakers operating in the morning but only 1 operating in the afternoon. He requested to shift the operation of the breakers to afternoon. | CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in September and October 2017, there were no breaches of EM&A requirement. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should properly maintain the noise mitigation measures as appropriate. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | | TCS00864/16/300/F0106 |
| 12 | 3-Oct-17 | 13-Oct-17 | Chun House, Tat Estate | Resident of On Tat Estate | Construction noise | EPD | EPD (ref. N08/RE/0003240 7-17) | Day time construction noise, the complainant requested using less breaker at one time, erecting taller noise barrier to cover the equipment. In addition, the complainant would like to know the construction schedule whether there will be more breaking activities in near future | | no comment by IEC on 30 Nov 2017 | TCS00864/16/300/F0106 |
| 13 | 25-Oct-17 | 26-Oct-17 | Tat Kwai House, Po Tat Estate | Resident of Po Tat | Dust | EPD | NA | 投訴安達臣道地盤的泥車落泥，令他達貴樓的住所受到大塵影響，要求跟進 | Investigation revealed that CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the | no comment by IEC on 00 | TCS00864/16/300/F0100 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|-------------------------------|---------------------------|---------------------------|--------------|----------|--|--|----------------------------------|-----------------------|
| | | | Estate | | | | | 及回覆 | nearby resident. Nevertheless, based on the observation during site inspection on 31 October 2017, CWSTVJV was advised to enhance the dust mitigation measures particularly during dry season. | 15 Nov 2017 | |
| 14 | 6-Nov-17 | 7-Nov-17 | Chun Tat House, On Tat Estate | Resident of On Tat Estate | Noise | EPD | NA | 安達邨俊達樓居民投訴石礦場地盤又再於早上07:45開始傳出機器不停掠石的噪音(幾乎每日在08:00-19:00進行工程),已持續一年,他全家人受到滋擾。 | Ad-hoc noise measurement was conducted by ET at rooftop of Chun Tat House in the morning of 20 November 2017 and measurement result was below the Limit Level under the EM&A Programme. CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 30 Nov 2017 | TCS00864/16/300/F0109 |
| 15 | 13-Nov-17 | 14-Nov-17 | Chi Tai House, On Tai Estate | Mr. Lam Wai | light pollution and noise | SPRO hotline | NA | 1. 智泰樓面向安達臣地盤方向,有照射燈深夜時分仍然常開,影響居民正常睡眠質素,照成一定的精神壓力。 2. 隔音布未固定,大風吹過發出極大的聲浪 | To ease the concern by the complaint, CWSTVJV has adjusted the lights to the orientation pointing the ground and that to minimise the nuisance. For the maintenance of noise barrier, CWSTVJV has immediately fixed the noise barrier nearest to On Tai Estate and prolonged the cover area of the noise barrier to reduce the noise impact to the public. | no comment by IEC on 24 Nov 2017 | TCS00864/16/300/F0104 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|-------------------------|-------------------------|---------------------------------|--------------------|-------------------------------|--|--|----------------------------------|-----------------------|
| 16 | 1-Nov-17 | 14-Nov-17 | Shing House, Tat Estate | Tat On Tat Estate | Resident of Po Tat Estate | Noise | EPD | NA | 居住於安達邨誠達樓高層的投訴人投訴由早上八時半至下午六時聽到掠鐵噪音。 | no comment by IEC on 13 Dec 2017 | TCS00864/16/300/F0110 |
| 17 | 25-Aug-17 | 26-Oct-17 | Sau House, Mau Estate | Yee Sau Mau Ping Estate | Resident of Sau Mau Ping Estate | Construction Noise | EPD (ref.N08/RE/0002 7738-17) | Night time construction noise of hammering (around 12AM) | As advised by CWSTJV, there was a CNP (GW-RE0763-17) in force for the subject site for operation of generator and electric submersible water pump for the wastewater treatment plant and it is considered that abovementioned PMEs should not generate significant noise. Moreover, it is confirmed by CWSTJV and checked against the site diary that no construction activities were carried out after 19:00 at the subject site. Therefore, the complaint about noise nuisance during night time should not be related to the Project. | no comment by IEC on 14 Dec 2017 | TCS00864/16/300/F0114 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|------------------------|---------------------------------|--------------------|-------------|-------------------------------|---|---|----------------------------------|-----------------------|
| 18 | 12-Sep-17 | 26-Oct-17 | Chun House, Tat Estate | Resident of On Tat Estate | Construction Noise | EPD | EPD (ref. N08/RE/00029489-17) | Day time construction noise of breakers (8AM to 5PM) | Noise mitigation measures were implemented to reduce the noise impact to the nearby resident. According to the impact noise monitoring result in September 2017, there were no breaches of EM&A requirement. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 10 Jan 2018 | TCS00864/16/300/F0117 |
| 19 | 15-Dec-17 | 21-Dec-17 | Sau House | Resident of Sau Mau Ping Estate | Construction Noise | EPD | NA | Resident of Sau Yee House complained suspected construction noise from Anderson Construction Site at restricted hour (7pm to 7am). | It is confirmed by CWSTVJV and checked against the site diary that no construction activities were carried out after 19:00 at the subject site. Therefore, the complaint about noise nuisance during night time should not be related to the Project. | no comment by IEC on 10 Jan 2018 | TCS00864/16/300/F0118 |
| 20 | 20-Dec-17 | 21-Dec-17 | On Estate | Resident of On Tat Estate | Dust | EPD | NA | Resident of On Tat Estate complained that the traffic of construction vehicles generated dust problem and arouse air pollution to On Tat Estate. 投訴安達臣道信和地盤水車已經壞了十多天，一直無灑水，四周非常大塵。 投訴人住於安達邨，投訴安達臣道石礦場有大地盤，地盤大車工作時間不停出入揚起沙塵，吹到安達邨，影響空氣環境，要求部門到場視察。 | CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident. It is considered that the complaint was an isolated case due to malfunction of water tanker and CWSTVJV has promptly rectified the deficiency. As advised by CWSTVJV, another water tanker will be deployed in mid-January 2018 to enhance the dust suppression measures throughout the construction site. | no comment by IEC on 25 Jan 2018 | TCS00864/16/300/F0121 |
| 21 | 28-Dec-17 | 10-Jan-18 | Sau House | Resident of Sau Yee | Construction Noise | CE's office | NA | 日間及凌晨均聽到轟隆聲的噪音及震動，懷疑是由 | ET has conducted an ad-hoc noise measurement for Leq (30min) in the | no comment | TCS00864/16/300/F0129 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--------------------|--------------------------------------|--------------------|-------------|----------|---|---|---------------------------------|-----------------------|
| | | | | Mau Ping Estate | | | | 附近工程引起* Thomas先生表示居於秀茂坪邨秀義樓，指附近的安達臣道一個由土木工程拓展署管轄的石礦場不時於非允許時段(即晚上七時後至翌日早上)發出疑似打地基的轟轟聲巨響，最近一次就是今早(28/12)凌晨五時多再次聽到石礦場傳來聲響，將 Thomas 先生吵醒，懷疑有人刻意在無人監管下施工，更表示曾向環保署及土木工程署作出投訴，但環保署表示巡查後無發現在非允許時段有工程進行，而土木工程署則表示晚上七時後不會再進行工程。Thomas 指石礦場經常在晚上八至十二時，或凌晨時份發出巨響，對附近居民已造成很大的滋擾，要求相關部門儘快作出跟進及回覆。 | complainant's flat in the monitoring of 17 January 2018. It was noted that the complainant's flat is not in direct line of sight to the Anderson Road Quarry Site. The measurement noise result was below the Limit Level under the EM&A Programme. Moreover, it is confirmed by CWSTVJV and checked against the site diary that no construction activities were carried out during restricted hour at the subject site. Therefore, the complaint about noise nuisance during restricted hour should not be related to the Project. | by IEC on 8 Feb 2018 | |
| 22 | 15-Jan-18 | 15-Jan-18 | Chun Tat House | Resident of Chun Tat House of On Tat | Construction Noise | SPRO mobile | NA | She is irritated by the construction noise of breaking rock for a long time and strongly requested to know exactly when will be the completion date of the | CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in January 2018, there were no breaches of EM&A requirement. However, to eliminate the inconvenience caused to | no comment by IEC on 8 Feb 2018 | TCS00864/16/300/F0130 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--|---|--------------------|--------------|----------|---|---|----------------------------------|-----------------------|
| | | | | Estate, 40/F | | | | breaking rock part of works opposite to Chun Tat House. She said we should do more on the mitigation measures because our site is very close to the residents nearby. | the nearby resident, CWSTVJV should properly maintain the noise mitigation measures as appropriate. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | | |
| 23 | 1-Feb-18 | 2-Feb-18 | Chi Tai House of On Tai Estate (referred by Mr. Lam Wai) | Resident of On Tai Estate (referred by Mr. Lam Wai) | Construction Noise | SPRO hotline | NA | "智泰對出，白天噪音過大，可否加裝隔音板?高層受影響" | the Environmental Team has conducted an ad-hoc noise measurement for Leq(30min) at the corridor of 22/F of Chi Tai House on 2 February 2018 facing the construction site. The measurement noise result was 65dB(A) which below the Limit Level under the EM&A Programme. In our investigation, CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in January 2018, there were no breaches of EM&A requirement. | no comment by IEC on 22 Feb 2018 | TCS00864/16/300/F0137 |
| 24 | 1-Feb-18 | 2-Feb-18 | Shing Tat House of On Tat Estate | Resident of Shing Tat House (referred by Mr. Hsu Yau Wai) | Construction Noise | SPRO hotline | NA | Mr. Hsu reported that some disturbing noise was heard after 6:00 pm from the site near Shing Tat House of On Tat Estate. | AECOM has liaised with Mr. Hsu on 2 February 2018 for the complaint matter and he reported to AECOM that the noise was generated until 7:00 pm on 1 February 2018. 3. As advised by Contractor of Contract 1, breaking works at USRT area which opposite to Shing Tat House was only carried out from 8:00 to 18:00. However, rock breaking at System A was extended to 19:00 on 1 February 2018. As noise mitigation measures, noise barriers were erected for the works area. | no comment by IEC on 28 Feb 2018 | TCS00864/16/300/F0140 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|----------------------------------|-----------------------------|--------------------|-------------|----------|---|---|----------------------------------|------------------------|
| | | | | | | | | | Further to the complaint case, CWSTVJV would seek for other quiet work method such as using drilling machine to reduce noise level and speed up the rock breaking process, so that to reduce the noise intensity level and the duration of exposure. | | |
| 25 | 28-Feb-18 | 28-Feb-18 | Shing Tat House of On Tat Estate | Resident of Shing Tat House | Construction Noise | EPD | NA | 安達邨誠達樓居民, 投訴人是返夜班, 一年半以來長期受對出地盤日間掠石仔噪音滋擾, 由於單位與地盤太近, 堅持環保署跟進及回覆如何處理及減低噪音, 他亦要求知道何日完工. | Breaking works at Underground Stormwater Retention Tank area which opposite to Shing Tat House was carried out from 8:00 to 18:00. The Contractor has implemented noise mitigation measures to reduce the noise impact to the nearby resident. It was advised that the rock breaking works shall tentatively be completed by end of April and it is believed that the noise impact should be minimized. Since the works were carried out within the non-restricted hours and noise monitoring noise were within acceptable level, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 19 Mar 2018 | TCS00864/16/300/F0143 |
| 26 | 11-Apr-18 | 12-Apr-18 | Him Tat House of On Tat Estate | Resident of Him Tat House | Construction Noise | SPRO mobile | NA | Mr. Hui Yau Wai reported that the noise irritation was becoming more severe recently and asked about the completion date of the works close to Him Tat House. The resident suspected that the noise comes from piling works nearby. | In our investigation, since construction noise was generating from other construction site next to Him Tat House, it is considered that the complaint is due to cumulative noise generated by both construction sites. However, CWSTVJV should properly provide the noise mitigation measures at works area in System B to minimize the noise impact to the resident nearby. As advised by CWSTVJV on 20 April 2018, noise barrier | no comment by IEC on 7 May 2018 | TCS00864/16/300/F0160b |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--|---|--------------------|---------|----------|---|--|-----------------------------------|------------------------|
| | | | | | | | | | was being erected at works area in System B as noise mitigation measures. According to the site photo, it is considered that the coverage of noise barrier is not sufficient and CWSTVJV should enhance the measure as far as practicable. The implementation of noise mitigation measures will be kept in view in subsequent site inspection. | | |
| 27 | 25-Apr-18 | 7-May-18 | Junction of Hiu Kwong Street and Hiu Ming Street | A school but name of school not disclosed | Construction Noise | EPD | NA | This case is considered as an enquiry and no investigation is required under the EM&A Programme. | | | |
| 28 | 18-May-18 | 24-May-18 | Anderson Road Quarry Site | Undisclosed | Construction Noise | EPD | NA | 投訴人指安達臣道石礦場地盤(NE/2016/01)在入夜19:00 後仍見到有長臂喉工程車在運作，及持續產生大噪音及閃燈，非常擾民。 | As advised by CWSTVJV and confirmed by RE/AECOM, there were no construction activities carried out after 19:00 and concreting was completed before 19:00. It is concluded that the retracting process is not a general construction work using Powered Mechanical Equipment and complaint was an isolated case due to misunderstanding of the site operation. To prevent similar incidents in future, CWSTVJV has recommended several mitigation measures. | no comment by IEC on 30 July 2018 | TCS00864/16/300/F0174b |
| 29 | 25-Jun-18 | 19-Jul-18 | Pedestrian Connectively E8 under Contract 3 | Kwun Tong DC member Ms. | Waste Management | CEDD | NA | A public complaint was referred from CEDD on 4 July 2018 regarding accumulation of dead leaves and branches found | CW-CMGC-JV has immediately clear the dead leaves and maintain the site cleanliness. Since the construction work has not yet commenced and the dead leaves and overgrown branches were not | no comment by IEC on 24 Sep 2018 | TCS00864/16/300/F0189b |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|----------------------------|--------------------|--------------|----------|--|--|----------------------------------|------------------------|
| | | | | So Lai-chun | | | | at slope (GLA-TNK 2458) near Hiu Yuk Path on 25 June 2018. The complainant requested the relevant department to clear the leaves and branch asap | related project works, it is considered that the complaint is not valid the project. | | |
| 30 | 22-Aug-18 | 29-Aug-18 | Hong Court | Resident of Hong Wah Court | Construction Noise | 1823 Hotline | NA | 吳先生於 2018 年 8 月 22 日致電 1823 热線投訴,指馬游塘區堆填區往將軍澳方向行車入口因配合項目需要而進行移除山坡工程,但其鑽地鑿石的噪音嚴重影響藍田康雅苑*居民,要求有關部門跟進。*註:投訴人於 2018 年 8 月 27 日更正指受影響屋苑應為藍田康華苑。 | to reduce the inconvenience caused to the nearby resident, Kwan On should properly maintain the noise mitigation measures as appropriate, such as maintain good site practice including intermittent use of machine and plant and Sequencing operation of construction plant equipment. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 7 Sep 2018 | TCS00864/16/300/F0196a |
| 31 | 28-Aug-18 | 31-Jul-18 | Anderson Road Quarry Site | Undisclosed | Construction Noise | EPD | NA | 安達邨誠達樓後面地盤,2月 26 日晚,晚上 7 時後,還在落石屎,相片拍攝時間大概晚上 9 時半,一直至晚上十一時五十分還有工程車在地盤行駛。影響居民休息。 | According to the site diary which countersigned by RE, there was no concreting work carried out after 18:00 and the construction activities conducted during restricted hours with valid CNP were completed at 23:00. It is considered that the complaint was not valid to the Project. Nevertheless, CWSTVJV was reminded that in case of any work activities need to be carried out during restricted hours, CWSTVJV should strictly follow the requirements specified in the valid CNP. | no comment by IEC on 10 Oct 2018 | TCS00864/16/300/F0197a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|---------------------------------------|--------------------|------------------|----------|--|--|----------------------------------|------------------------|
| 32 | 6-Sep-18 | 7-Sep-18 | Tsui Yeung House | Resident of Tsui Yeung House | Construction Noise | Verbal | NA | Mr. CHENG Keung-fung complained that the contractor has conducted the noisy works such as rock excavation beyond the normal hours. | Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. As advised by Kwan On, the rock breaking works shall tentatively be completed by end of December 2018 and the mitigation measures will be implemented continuously during slope construction work and the slope construction will be carried out within the working hours at Portion 2. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 22 Oct 2018 | TCS00864/16/300/F0201 |
| 33 | 24-Oct-18 | 25-Oct-18 | E3 | Kwun Tong DC member Ms. So Lai-chu n | Construction Noise | Whatsapp Message | NA | KTDC member, Ms. Ann So, complaining the noise of the breaker at E3 | As advised by the Contractor, the acoustic material wrapped on the breaker was worn-out on 24 October 2018 and replacement of new acoustic materials has been installed on the breaker immediately on 25 October 2018. The rock breaking works shall tentatively be completed to the road level in the middle of November 2018 and the mitigation measures will be implemented continuously during slope construction work and the slope construction will be carried out within the working hours at Portion 2. It is considered the complaint was an isolate case. | no comment by IEC on 23 Nov 2018 | TCS00864/16/300/F0209a |
| 34 | 12-Nov-18 | 13-Nov-18 | Anderson Road Quarry Site | Resident of Ching Tat House(r)eferred | Construction Noise | SPRO Hotline | NA | Mr. Hui reported that he received complaint from a resident living in Ching Tat House about noise nuisance recently. Mr. Hui asked if project team can | The SPRO contacted Mr. Hui and explained to him about the purpose and benefits of the tunnel to the residents nearby and the expected date of completion of the tunnel will be earlier than 2020. Moreover, the noise mitigation measures | no comment by IEC on 12 Dec 2018 | TCS00864/16/300/F0222a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|---------------------|------------------|---------|----------|--|--|----------------------------------|------------------------|
| | | | | by Mr. Hui Yau Wai) | | | | arrange some noise monitoring to check the noise level at the concerned flat or the same level at Ching Tat House. | had implemented to reduce the noise level effectively and the work progress will be closely updated to nearby stakeholders to enhance communication. Mr. Hui satisfied with the reply from SPRO and he agreed that the proposed noise monitoring in Ching Tat House was not needed. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no breaches of legislative requirement. | | |
| 35 | 14-Nov-18 | 14-Nov-18 | Anderson Road Quarry Site | Undisclosed | Light and Noise | EPD | NA | 凌晨 1 時，地盤仍有大光燈正射民居和機器移動聲音，影響附近居民睡眠及違反環保條例。 | CWSTVJV immediately adjusted the angle and brightness of the lighting to minimize the nuisance to the resident nearby. In response to the complaint, CWSTVJV immediate carried out remedial action to minimize the nuisance to the public. It was considered that complaint for noise generated by machine moving was an isolated case. CWSTVJV was reminded to closely monitor the plant use and sequence of night work and do not to violate CNP conditions. | no comment by IEC on 3 Jan 2019 | TCS00864/16/300/F0223a |
| 36 | 13-Nov-18 | 14-Nov-18 | Anderson Road Quarry Site | Undisclosed | Noise and dust | 1823 | NA | Complainant requested to postpone the starting time of construction work at project site and also to solve the problem of construction noise and dust. | In our investigation, acoustic barrier and site hoarding were in place along the works area. No noticeable noise and dust impact was observed during the site inspection. As advised by CWSTVJV, the normal working hour of the construction site is 8am to 6pm and there were no violation of the relevant regulations. The senior public relation officer contacted the complainant Ms. Ma on 26 November 2018 to explain the site situation and she | no comment by IEC on 18 Feb 2019 | TCS00864/16/300/F0224 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|--------------------|---------|--------------|--|---|----------------------------------|------------------------|
| | | | | | | | | | was satisfied with the reply. Investigation Report has been completed by ET without comment from IEC. | | |
| 37 | 9-Dec-18 | 12-Dec-18 | Anderson Road Quarry Site | Undisclosed | Construction noise | 1823 | 2-4927907305 | 1823 has referred a case to CEDD on 10 December 2018, which the complainant complained that construction noise was generated from project site on Sunday and was affecting the resident at Hau Tat House, On Tat Estate. The complainant requested follow up action from related department as soon as possible. | In our investigation based on the information provided by CWSTJV, there was no site activities undertaken at site access road as concerned by the complainant. The construction work carried out on Sunday was fully compliance with the CNP requirement. In response to the complaint, CWSTJV was reminded to closely monitor the plant use and sequence of night work and do not to violate CNP conditions. | no comment by IEC on 10 Jan 2019 | TCS00864/16/300/F0230a |
| 38 | 19-Dec-18 | 27-Dec-18 | Anderson Road Quarry Site | Undisclosed | Construction noise | 1823 | 2-4948074127 | 1823 has referred a case to CEDD on 27 December 2018, which the complainant complained that noise barriers near the round-about at On Sau Road were not enough, and construction noise generated from the project site was affecting the resident at Ming Tai House, On Tai Estate. The complainant requested follow up actions from related department as soon as possible. | Joint site inspection was carried out on 3 January 2019 the status of implemented mitigation measures provided by CWSTJV was inspected. It was observed that noise mitigation measures including temporary noise barrier, acoustic mat and wrapped by acoustic materials are implemented on site. However, CWSTJV was advised to extend the coverage of noise barrier as far as practicable and fully enclose the concerned works area which has been completed on 15 January 2019. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 31 Jan 2019 | TCS00864/16/300/F0237a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|-------------------|--------------|--|---|----------------------------------|------------------------|
| 39 | 24-Jan-19 | 29-Jan-19 | Anderson Road Quarry Site | Undisclosed | wastewater | Referred from DSD | NA | DSD has referred a case to CEDD on 24 January 2019 regarding suspended illegal discharge of cementitious slurry from construction site of Development of ARQ Site to nearby Public Stormwater Drainage System. | In our investigation, the concerned catchpit and U-channel mainly received the runoff from Po Lam Road as well as the discharge from the Anderson Road Quarry Site. It is suspected that the mud and silt found on the downstream has been accumulated over time particularly by rainstorm as well as routine discharge from construction site. As remedial action, CWSTJV immediately clean the affected area where accessible. Nevertheless, in order to protection the watercourse at downstream of the construction site, CWSTJV has some enhancement measures. | no comment by IEC on 29 Mar 2019 | TCS00864/16/300/F0248a |
| 40 | 30-Jan-19 | 30-Jan-19 | Anderson Road Quarry Site | Undisclosed | noise | SPRO hotline | NA | A public complaint was received by SPRO hotline on 30 January 2019 regarding the construction noise near Ma Yau Tong Village and requested to add noise barrier as soon as possible. | In our investigation, CWSTJV had provided the noise mitigation measures to minimize the noise impact to the resident nearby. The impact monitoring result obtained at Ma Yau Tong Village revealed that the construction noise were within acceptable level. Since the works were conducted within approved normal hours with implementation of noise and dust mitigation measures, there were no breaches of legislative requirement. | no comment by IEC on 15 Mar 2019 | TCS00864/16/300/F0249a |
| 41 | 15-Feb-19 | 25-Feb-19 | Anderson Road Quarry Site | Undisclosed | noise | 1823 | 2-4948074127 | 1823 has referred a case to CEDD on 15 February 2019, which the complainant complained about the construction noise generated from the CEDD site near 法源寺 (Ma Yau Tong Village). The complainant requested | In response to the complainant, CWSTJV has proposed alterative quiet work method to alleviate the noise impact to the public. They will schedule the noisy activities to be carried out after 10am as far as practicable to minimize the impact to resident nearby, given that not affecting the site progress. Moreover, the coverage of acoustic barriers will be extended in view | no comment by IEC on 29 Mar 2019 | TCS00864/16/300/F0251a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|---------|----------|---|---|----------------------------------|-----------------------|
| | | | | | | | | for the details of works and the completion date, the complainant also requested CEDD to use other construction methods in order to re | of the works programme. | | |
| 42 | 21-Feb-19 | 25-Feb-19 | Anderson Road Quarry Site | Undisclosed | noise | EPD | NA | The resident from Sau Hong House complained that the noise from the Anderson Road Quarry construction site has gotten worse. In addition, sometimes even after midnight there are noise coming from the site. With the echo produces from the environment, this is not helping at all. Really a big disturbance to the residence in the area. The complainant suspecting the sound proof measure has lessen as time goes. Follow action is requested. | In our investigation, CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should properly maintain the noise mitigation measures as appropriate, such as maintain good site practices such as intermittent use of machine and plant and Sequencing operation of construction plant equipment. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 28 Mar 2019 | TCS00864/16/300/F0250 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|---------------------------------------|----------|---|--|----------------------------------|------------------------|
| 43 | 21-Feb-19 | 26-Feb-19 | Anderson Road Quarry Site | Undisclosed | noise | received by DEVB and referred to CEDD | NA | A public complaint was received by DEVB and referred to CEDD on 25 February 2019 regarding on the noise generated from the construction works of the Anderson Road Quarry Site affecting a local resident residing at the Anderson Road Squatter Area | Additional acoustic mat has been erected in front of the Squatter Area to minimize the noise impact. Noise mitigation measures such as acoustic barriers erected along the works area and breaker head wrapped with acoustic material were implemented continually. Alternative quiet work method was adopted such as drilling the hard rock before the breaking work to reduce the breaking duration. In our investigation, CWSTVJV had enhanced the noise mitigation measures to ease the complainant's concerns. CWSTVJV will continually implement the noise mitigation measures to reduce the noise impact to the public. | no comment by IEC on 29 Mar 2019 | TCS00864/16/300/F0252a |
| 44 | 1-Mar-19 | 26-Feb-19 | E3 Contract 2 of | Undisclosed | noise | CEDD | NA | A complaint is forwarded by CEDD which was received by KTDC member Mr CHENG Keung Fung from the residents of Tsui Yeung House (翠楊樓) about the noise nuisance generated and the working time up to 7:00 pm from the rock excavation of E3 lift tower. Follow up action is requested. | The representative of the engineering team explained to Mr. Cheng about the project's details and concerned site was being constructed for the future pedestrian connection facilities. The related stone drilling process is expected to be completed in mid-April to end of April 2019. Mr. Cheng was satisfied with the rapid response from CEDD and the engineering team. In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance. | no comment by IEC on 6 May 2019 | TCS00864/16/300/F0264 |

| Log ref. | Date of Complainant | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|---------------------|------------------------|---------------------------|-------------|------------------|---------|----------|---|--|-------------------------------------|------------------------|
| 45 | 16-Jun-19 | 18-Jun-19 | Anderson Road Quarry Site | Undisclosed | noise | EPD | NA | EPD referred a case to CEDD on 17 June 2019 regarding the construction noise heard at On Tat Estate on Sunday. | The Contractor explained that general cleaning by water jet was carried out in the construction site on the concerned day. Since the work did not involve the use of Powered Mechanical Equipment (PME), it would not violate the noise control ordinance. The Investigation report is underway by ET. | no comment by IEC on 21 August 2019 | TCS00864/16/300/F0301a |
| 46 | 12-Jul-19 | 15-Jul-19 | Anderson Road Quarry Site | Undisclosed | dust | EPD | NA | On 12 July 2019, a complaint was received by EPD regarding the dust impact to the residents at Po Tat Estate and On Tat Estate due to the dust emission at Anderson Road Quarry site. | In our investigation, CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident and status of implementation of dust mitigation measures was considered effective based on the site observation. Moreover, there was mostly rainy day throughout June and July 2019 in typical rainy season in Hong Kong and the dust impact was considered not significant in addition to the dust mitigation measures implemented provided by the Contractor. Nevertheless, the ET will closely monitor the environmental performance and dust mitigation measures in subsequent site inspection. The IR is under reviewed by IEC. | no comment by IEC on 12 August 2019 | TCS00864/16/300/F0292b |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---|---------------|------------------|---------|----------|---|--|----------------------------------|------------------------|
| 47 | 6-Aug-19 | 14-Aug-19 | Work Area Portion 2 E3 (Slope of Hiu Ming Street opposite of Tsui Yeung House) | 翠屏(北)邨物業服務辦事處 | Noise | 1823 | NA | A public complaint was received by 1823 on 6 August 2019 relating to the noise generated from construction work at the lift tower site (Slope E3) at Hui Ming Street from the residents of Tsui Yeung House. The complainant expressed that the construction works has been undertaken for 2 years and generated construction noise from 8am every day, which causing serious nuisance to the nearby residents. | In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. It is concluded that the complaint was valid to the contract. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. | no comment by IEC on 16 Sep 2019 | TCS00864/16/300/F0310a |
| 48 | 15-Oct-19 | 18-Oct-19 | Work Area Portion 6 (Tseung Kwan O Tunnel Bus-Bus Interchange Pedestrian Connectivity Facilities E12) | Mr. Ng | Noise | 1823 | NA | A public complaint was received by 1823 on 15 October 2019 relating to the noise generated from construction work at Tseung Kwan O Tunnel Bus to Bus Interchange Pedestrian Connectivity Facilities E12. The complainant expressed that the construction noise was generated from breaking work at 8:20 am without noise mitigation measure, which causing nuisance to the nearby residents. | In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | no comment by IEC on 13 Nov 2019 | TCS00864/16/300/F0326a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--|-------------|------------------|---------|----------|--|--|----------------------------------|-------------------------|
| 49 | 5-Nov-19 | 11-Nov-19 | Work Area Portion 2&3 (lift tower construction work at Hiu Kwong Street) | NA | Noise | EPD | NA | A public complaint was received by EPD relating to the noise generated from breaking work of lift tower construction work at Hiu Kwong Street (Portion 2&3). | In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | no comment by IEC on 27 Dec 2019 | TCS00864/16/300/F03 32a |
| 50 | 7-Nov-19 | 11-Nov-19 | Work Area Portion 6 | Mr. Cheng | Noise | EPD | NA | 寶達邨居民鄭先生, 表示將軍澳隧道出口工程, 日間噪音嚴重, 8:30-17:00, 幾部幾同時開動, 而且無隔音欄, 之前是有, 現要求環保署向對方反映改善 | In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | no comment by IEC on 27 Dec 2019 | TCS00864/16/300/F03 33a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--------------------|-------------|------------------|---------|----------|--|---|----------------------------------|-----------------------|
| 51 | 10-Nov-19 | 12-Nov-19 | Underpass | Undisclosed | Noise | EPD | NA | <p>On 10 November 2019 投訴人為馬游塘村居民，自本年初寶琳路開展掘隧道工程，每天噪音不斷，由 8 至 6，由於欠缺遮擋，聲音直向 4 至 22 號村屋，將來通車，相信噪音不只 8-6，現懇請環保署為本村居民正式評估，並向政府提出村民困擾，考慮盡快設置隔音屏。</p> <p>On 11 November 2019 寶琳路近馬游塘村開掘隧道的工程地盤每日 8am-6pm 發出噪音，欠缺遮擋，聲音影響馬游塘村 4-22 號村屋。希望政府部門</p> <p>1. 調查地盤有否違規 2. 實施減音措施以減低對附近居民的滋擾</p> | <p>In our investigation, CWSTVJV had implemented the noise mitigation measures to reduce noise impact to the public. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. For the complainant's concern on the operation noise after commencement of the project, it is out of the scope of the EM&A programme and the relevant department will follow up the concern.</p> | no comment by IEC on 30 Dec 2019 | TCS00864/16/300/F0337 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---|--|------------------|---------|--------------------|--|--|----------------------------------|------------------------|
| 52 | 11-Nov-19 | 20-Nov-19 | Construction site near on Tai Estate Ancillary Facilities Building on On Sau Road | Mr. Wong (resident of Yung Tai House of On Tai Estate) | Noise | 1823 | ref. 2-597630 3183 | 黃先生投訴安秀道安泰邨服務設施大樓附近掘路工程已持續數年還未完成，並投訴其經常發出噪音滋擾，要求部門跟進。On 22 November 2019, the project hotline received a call from the same complainant reported on the noise nuisance near On Sau Road and On Yan Street. He suggested to speed up the noise making works by intensely concentrate the excavation works during day time. No intermittence is suggested in order to speed up the works and to avoid waste of manpower. | In our investigation, CWSTJV had implemented the noise mitigation measures to reduce to noise impact to the public. However, in response to the complaint, the Contractor was advised to enhance the performance of the temporary noise barriers such as increase the coverage of the noise barrier. Since the works were conducted within normal working hours with implementation of noise mitigation measures, there were no breaches of legislative requirement. | no comment by IEC on 27 Dec 2019 | TCS00864/16/300/F0338a |
| 53 | 5-Mar-20 | 6-Mar-20 | Tunnel work of Anderson Road Quarry Site (the Underpass) | Resident of On Tat Estate | Noise | EPD | NA | 本人是安達邨居民，隧道工程在安達臣的工程，施工至今嘈音間中改善，最近又有嘈音出現，仲係重低音，希望能加裝隔音設備，工程不知何時將嘈音減至最低。1. A public complaint was received by EPD on 5 March 2020 regarding the construction noise generated from the tunnel work of the subject site. The complainant | In our investigation, CWSTJV had implemented the noise mitigation measures to reduce to noise impact to the public. In response to the complaint, CWSTJV had immediately installed a layer of acoustic mat at boundary of System A. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. | no comment by IEC on 1 Apr 2020 | TCS00864/16/300/F0357a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--------------------------------------|-------------|------------------|---------|--------------------|--|--|----------------------------------|------------------------|
| | | | | | | | | mentioned that the noise from construction was improved before but it became serious recently. | | | |
| 54 | 4-Mar-20 | 17-Mar-20 | Near Hiu Ming Street Playground (E8) | Undisclosed | Noise | 1823 | ref. 3-628323 7171 | 投訴人投訴有關秀茂坪邨秀安樓附近有兩個地盤，地盤由星期一至五，每天早上約 9AM-5 PM 持續不斷發出強烈的嘈音，投訴人表示地盤是在曉明街藍球場旁邊的位置(投訴人未能告知確實街號)，因此要求部門盡快回覆及告知有關情況。 A public complaint was received by 1823 on 4 March 2020 regarding the construction noise. The complainant mentioned that there were two construction sites near Hiu Ming Street Playground generated construction noise continuously during 9AM to 5PM on weekdays. | In our investigation, CW-CMGCJV had implemented the noise mitigation measures for the works at upper section of E8 near Hiu Yuk Path and no noise impact was observed and anticipated in Hiu Ming Street based on the site activities and our inspection record. It is considered that the complaint is likely related to another construction site located near Hiu Ming Street Playground and not caused by the works under the Project. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. | no comment by IEC on 15 Apr 2020 | TCS00864/16/300/F0359a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|---------------------------|------------------|-----------------|----------|---|---|----------------------------------|------------------------|
| 55 | 23-Mar-20 | 23-Mar-20 | Near Lin Tak Road (E11) | Undisclosed | Water Quality | Project hotline | NA | 藍田居民梁先生反映在將軍澳道往連德道天橋的大彎位，其中有一個車輛出入口每日早上八時左右不時有泥水從地盤流出路面，估計泥水是清洗工程車輛所致，令梁先生的車輛每次駛經時被濺濕及弄污，請問有何措施改善問題？A public complaint was received by project hotline on 23 March 2020 regarding overflow of muddy water from the construction site. The complainant mentioned that muddy water came out from site entrance, which spotted on his car, at 8am every morning. | In our investigation, the wheel washing facilities at site exit of E11 is one of the dust quality mitigation measures conducted by CW-CMGCJV and corresponding measure was implemented to prevent overflow of wastewater out of the site. In our recent site inspection, no outflow of muddy water from the site was observed and the condition of concerned Lin Tak Road was satisfactory. It is considered that the complaint was unlikely due to the project. | no comment by IEC on 15 Apr 2020 | TCS00864/16/300/F0360a |
| 56 | 17-Mar-20 | 19-Mar-20 | Anderson Road Quarry Site | Resident of Yan Tat House | Noise | Project hotline | NA | 許有為區議員接獲安達邨仁達樓 2613 室居民反映，安達臣道石礦場發展用地工程噪音持續兩年，要求工程團隊下周派員到有關單位視察，並採取可行的噪音緩解措施。許有為區議員要求陪同視察。A public complaint was received by hotline on 17 March 2020 regarding the construction noise. | In our investigation, CW-CMGCJV has implemented noise mitigation measures to reduce the noise impact and nuisance to the public. However, to eliminate the inconvenience caused to the nearby residents, CW-CMGCJV was advised to further adopt good practices on mitigating construction noise to reduce the noise impact to the nearby residents. 5. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. | no comment by IEC on 11 May 2020 | TCS00864/16/300/F0361a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------|-------------|------------------|---------|----------|---|--|---------------------------------|------------------------|
| | | | | | | | | generated from the Anderson Road Quarry Site. The complainant mentioned that the construction noise generated from the Anderson Road Quarry Site had been continued for two years. | Nevertheless, as the construction site is close to the residential area, CW-CMGCJV was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | | |
| 57 | 1-Apr-20 | 20-Apr-20 | Work Area Portion 2 | Undisclosed | Noise | 1823 | NA | 觀塘秀茂坪紀念公園傍及曉明街的地盤，共兩個地盤，是地政總署管轄的。投訴人表示已被工程噪音滋擾了兩年多；另外投訴人得知完工時間要到2021年，投訴人不明白為何工程頭尾要3年多時間。要求地政總署直接以電郵回覆工程長的原因及有沒有措施解決地盤發出的噪音。A public complaint was received by 1823 on 1 April 2020 and subsequently transmitted to Environmental Team (ET) on 20 April 2020, regarding the noise nuisance generated from the construction site in Hui Ming Street. The complainant concerned about the slow progress and implementation of | In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce noise nuisance to the public. It is concluded that the complaint was valid to the contract. However, as the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | no comment by IEC on 7 May 2020 | TCS00864/16/300/F0366a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------|-------------|------------------|-----------------|----------|--|--|----------------------------------|------------------------|
| | | | | | | | | noise mitigation measures to alleviate the noise impact arising from the construction work. | | | |
| 58 | 11-May-20 | 12-May-20 | Work Area Portion 2 | Undisclosed | Noise | Project hotline | NA | 陳先生住於翠楊樓 17 樓，投訴對面鑽石工程產生噪音對母親健康構成影響，現查詢完工日期、噪音監控標準及措施。 A public complaint was received by Project Hotline on 11 May 2020 regarding the noise generated from rock breaking work from a construction site opposite to Tsui Yeung House, which affecting his mother's health. The complainant enquired about the completion date of construction work, construction noise level standard and implementation of noise mitigation measures on site. | In our investigation, Kwan On has enhanced the noise mitigation measures to reduce the noise impact to the nearby resident. Based on the noise measurement result, the construction noise was reduced to acceptable level after the additional noise mitigation measures in place. Nevertheless, Kwan On was reminded to continually implement the noise mitigation measures as far as practicable in the remaining work. The performance of noise mitigation measures will keep in view by ET in subsequent site inspection | no comment by IEC on 28 May 2020 | TCS00864/16/300/F0370a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--|-------------|------------------|---------|----------|---|---|-------------------------------------|------------------------|
| 59 | 18-Jun-20 | 23-Jun-20 | Anderson Road Quarry Site, System B | Undisclosed | Noise | EPD | NA | A public complaint was received by EPD on 18 June 2020 regarding the noise generated from rock breaking by machinery before 7pm from construction site near Hau Tat House. The complainant understood that the Contractor could carry out construction works, other than percussive piling, before 7pm under the CNP and hoped that the Contractor could arrange the noisy construction works to be carried out before 6pm. According to the information provided by the complainant, it is suspected that the complaint location would be Anderson Road Quarry Site, System B. | In our investigation, the Contractor has implemented noise mitigation measures to reduce the noise impact and nuisance to the public. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, the Contractor was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme | no comment by IEC on 17 July 2020 | TCS00864/16/300/F0391a |
| 59# | 23-Jul-20 | 24-Jul-20 | Anderson Road Quarry Site near On Tat Estate | Undisclosed | Noise | EPD | NA | A public complaint was received by EPD on 23 July 2020 regarding the construction noise generated from the use of PME at Anderson Road Quarry Site near On Tat Estate at 6:30am (restricted hours). He/ she requested | In our investigation, CWSTVJV had restricted the use of PME before 7am. There was no construction work and use of PME during the restricted hours. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. Nevertheless, as the construction site is | no comment by IEC on 25 August 2020 | TCS00864/16/300/F0401 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--|-------------|------------------|------------|---------------|--|--|-------------------------------------|-----------------------|
| | | | | | | | | relevant department to follow up. | close to the residential area, CWSTVJV was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme | | |
| 60 | 14-Nov-20 | 18-Nov-20 | Near Hiu Ming Street Playground (E8) | Undisclosed | Noise | 1823 | NA | A public complaint was received by 1823 on 14 November 2020 regarding the construction noise. The complainant mentioned that there was piling works at Hiu Ming Street Playground, generating huge noise during 9AM to 10AM on 14 November 2020. He/she requested relevant department to follow up | In our investigation, there was no noise impact was observed and anticipated in Hiu Ming Street based on the site activities and our inspection record. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement | no comment by IEC on 4 January 2021 | TCS00864/16/300/F0424 |
| 61 | 4-Dec-20 | 7-Dec-20 | Opposite to On Tai Estate – lower portion of Road L4 | Undisclosed | Dust | EPD | NA | A public complaint was received by EPD on 4 December 2020 regarding the dust impact. The complainant mentioned that the construction site opposite to On Tai Estate had dust emission problem due to lack of water spraying. He/she requested relevant department to follow up | In our investigation, CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident. In view of the potential traffic dust impact and implementation of dust mitigation measures, it is considered that the complaint was not valid to the Project | no comment by IEC on 4 January 2021 | TCS00864/16/300/F0434 |
| 62 | 3-Dec-20 | 7-Dec-20 | Ma Yau Tong Village (East Portal) | Undisclosed | Noise and dust | 1823 & EPD | 3-657414 1017 | A public complaint was received by 1823 and EPD on 14 November 2020 | In our investigation, CWSTVJV had provided the dust and noise mitigation measures to minimize the dust and noise | no comment by IEC on | TCS00864/16/300/F0435 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--------------------|---------------------------|------------------|-----------------|----------|--|--|-----------------------------------|-----------------------|
| | | | | | | | | regarding the construction dust and noise impact arising from the project. There were acoustic mats erected on the slope of East Portal, however, the complainant enquired about effectiveness of the noise barriers with dozens of 15 cm "X"-shaped cuts. Moreover, there was lack of water sprinkling on the site and fugitive dust was blowing to the village | impact to the resident nearby. To response the concern from the complainant, as enhancement noise measure, the Contractor extended the noise barrier to encircle noisy activity. Since the works were conducted within approved normal hours with implementation of noise and dust mitigation measures, there were no breaches of legislative requirement | 4 January 2021 | |
| 63 | 7-Jan-21 | 7-Jan-21 | System B | Resident of Yan Tat House | Noise | Project hotline | NA | A public complaint was referred by district Councillor Mr. HSU Yau-wai and received by project hotline on 7 January 2021 regarding the construction noise. The complainant mentioned that the construction site next to SKH St. John's Tsang Shiu Tim Primary School generated noise problem and she requested relevant department to follow up. | In our investigation, the Contractor has implemented noise mitigation measures to reduce the noise impact and nuisance to the public.6. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, the Contractor was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | no comment by IEC on 19 July 2021 | TCS00864/16/300/F0441 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---|-------------|------------------|------------|----------|--|---|-----------------------------------|------------------------|
| 64 | 18-Mar-21 | 18-Mar-21 | Anderson Road Quarry Site (between On Tat Estate and On Tai Estate) | Undisclosed | Noise | 1823 & EPD | NA | A public complaint was received by 1823 and referred by EPD on 18 March 2021 regarding the construction noise generated from construction works at Anderson Road Quarry Site between On Tat Estate and On Tai Estate. The complainant expressed that construction works of the site started from 6:45am everyday which causing noise disturbance to the nearby resident and he/ she requested relevant department to follow up | In our investigation, CWSTVJV had restricted the use of PME before 7am. There was no construction work and use of PME during the restricted hours and there should not be any non-compliance of Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, CWSTVJV was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme | no comment by IEC on 1 April 2021 | TCS00864/16/300/F0454 |
| 65 | 1-Apr-21 | 1-Apr-21 | Construction site near SKH St. John's Tsang Shiu Tim Primary School (System B under Contract 3) | Undisclosed | Noise | EPD | NA | A complaint was received by EPD and referred to CEDD on 1 April 2021 regarding the construction noise. The complainant mentioned that piling work was conducted at construction site near SKH St. John's Tsang Shiu Tim Primary School in recent week which generated noise problem. Moreover, there were no noise mitigation measures provided in the construction site | In our investigation, the Contractor has implemented noise mitigation measures to reduce the noise impact and nuisance to the public. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Moreover, the Contractor has adopted noise mitigation measures to minimise noise impact to the public. Since the construction site is close to the residential area, the Contractor was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme | no comment by IEC on 19 July 2021 | TCS00864/16/300/F0458a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---|---|------------------|---------|--------------------|--|--|------------------------------------|------------------------|
| 66 | 28-Mar-21 | 30-Mar-21 | Anderson Road Quarry Site (between On Tat Estate and On Tai Estate) | Resident of Tai Fung House of On Tai Estate | Noise | EPD | K13/RE/00007086-21 | A public complaint was received by EPD on 28 March 2021 regarding the construction noise generated from construction works at Anderson Road Quarry Site until 9pm on Monday to Saturday. Moreover, the complaint concerned about the construction noise heard on 28 March 2021 which was a Sunday. | In our investigation, CWSTVJV had followed that CNP for work during restricted hour and there should not be any non-compliance of Noise Control Ordinance. Nevertheless, some site areas had been handed over to other contract and construction noise generated from others is not controlled by the project. As a reminder, CWSTVJV should implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | no comment by IEC on 22 April 2021 | TCS00864/16/300/F0459 |
| 67 | 11-Jun-21 | 11-Jun-21 | Anderson Road Quarry Site | Resident of Chi Tat House, On Tai Estate | Noise | EPD | Ref.: 13208-21 | A public complaint was received by EPD on 11 June 2021 and complained about noise nuisance from multiple construction sites on Anderson Road Quarry Site. The complainant stated that there were noise nuisances from different construction sites from 0800 am to 1800 pm from Monday to Saturday without adequate noise mitigation measures. On 17 June 2021, the complainant added that the noise was generated from rock breaking works in front of Chi Tai House (not from the housing sites near the Tai Sheung Tok slope) | 6. In our investigation, CWSTVJV had implemented the noise mitigation measures to reduce to noise impact to the public. In response to the complaint, CWSTVJV had immediately installed a layer of acoustic barrier at boundary of concern works area. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. | no comment by IEC on 19 July 2021 | TCS00864/16/300/F0478a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|---------|--------------------|--|---|-------------------------------------|------------------------|
| | | | | | | | | and no mitigation measure was implemented for the rock breaking works. | | | |
| 68 | 20&21/June/21 | 23-Jul-21 | Anderson Road Quarry Site | DSD | Water Quality | EPD | EPD Ref.: 13208-21 | EPD received complaints from DSD on 20 and 21 July 2021 concerning about discharge of muddy water as found on Po Lam Road and at the drainage facility near Tin Hau temple. | In our investigation, CWSTVJV had implemented the water quality mitigation measures to minimise the impact arising from the construction site. In view of the site condition and inclement weather condition on the complaint days, it is considered that the complaints raised by DSD were unlikely due to the C1 Project. Nevertheless, CWSTVJV was advised to closely monitor the discharge quality to avoid non-compliance of water quality happened in the construction site. Moreover, to cope with the adverse weather condition in wet season, CWSTVJV should regularly review the drainage plan as needed. | no comment by IEC on 6 August 2021 | TCS00864/16/300/F0485b |
| 69 | 14&16/Sep/21 | 15-Sep-21 | Anderson Road Quarry Site | DSD | Water Quality | EPD | NA | EPD received complaints from DSD on 14 Sep 2021 and 16 Sep 2021 concerning about discharge of muddy water as found at the catchpit SCH4003250 near Po Lam Road and catchpit SSH4001400 near Po Tat Tin Hau Temple. | In our investigation, CWSTVJV had implemented the water quality mitigation measures to minimise the impact arising from the construction site. However, there were incidents of seepage of silty water at Q2 and Q3 and rectified actions were undertaken immediately. Having investigated, the incidents were considered very short term and would not generate large amount of muddy water. In view of the inclement weather condition and there were other major sources, it is considered that the complaints raised by DSD were not fully contributed by C1 Project. Nevertheless, CWSTVJV was advised to | no comment by IEC on 6 October 2021 | |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|-----------|----------|--|---|---------------------------------------|-----------------------|
| | | | | | | | | | closely monitor the discharge quality to avoid non-compliance of water quality happened in the construction site. Moreover, to cope with the adverse weather condition in wet season, CWSTVJV should regularly review the drainage plan as needed. | | |
| 70 | 23/Sep/21 | 29-Sep-21 | Anderson Road Quarry Site | CEDD & EPD | Noise | CEDD &EPD | NA | A public complaint was referred by 1823 to both CEDD and EPD on 23 September 2021. The complainant stated that the construction works at Anderson Road Quarry Site started before 7am, which generated construction noise and affecting the upper floor resident of On Tat Estate. EPD have contacted the complainant and clarify that the concerned about construction dust and daytime construction noise after 7am. | Our investigation revealed that there was no construction works under the Project undertaken during the concerned period by the complainant, and there were other concurrent contracts on Anderson Road Quarry Site and the contribution noise may be related to others. Therefore, it is considered that the noise complaint was unlikely to be related to the works under the Project. Nevertheless, CWSTVJV was reminded to properly maintain the noise mitigation measures as far as practicable considering the construction site is relatively close to residential area. | No comment by IEC on 15 November 2021 | |
| 71 | 30/Mar/22 | 12/Apr/22 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | EPD received complaint from DSD on 28 March 2022 concerning about siltation and discharge of muddy water observed at the public drainage system | In our investigation, the Contractor had implemented the water quality mitigation measures to minimise the impact arising from the construction site. Based on the investigation findings, it is considered that the complaint was likely caused by the | No comment by IEC on 19 April 2022 | TCS00864/16/300/F0540 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|---------|----------|---|--|-----------------------------------|-----------------------|
| | | | | | | | | at catchpit SSH4001400 near Tin Hau Temple and the site discharge points at Po Lam Road on 28 March 2022 | interfacing contractors under rainy days and not due to the works under the Project. | | |
| 72 | 14/Apr/22 | 25/Apr/22 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | DSD carried out site inspection at site discharge point at Po Lam Road on 12 April 2022 and observed discharge of muddy water at public drainage system. The case was then referred to CEDD and EPD to investigate the source of the muddy water discharge. | In our investigation, the Contractor had implemented the water quality mitigation measures to minimise the impact arising from the construction site. Based on the investigation findings, it is considered that the complaint was likely caused by the interfacing contractors and not due to the works under the Project. | No comment by IEC on 16 May 2022 | TCS00864/16/300/F0541 |
| 73 | 11/May/2022 | 25/May/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | EPD received complaint from DSD on 11 May 2022 concerning about muddy water observed entering Tsui Ping River, with similar situation observed at Tin Hau Temple and Po Lam Road. | Based on the above findings and successive heavy rainstorm on 11 to 13 May 2022, it is considered the muddy water found in the concerned catchpit SSH4001400 near Tin Hau Temple and Po Lam Road on 11 to 13 May 2022 were likely caused by impact of rainstorm and partially contributed by the interfacing contractors at Sites R2-9 & R2-10. | No comment by IEC on 13 June 2022 | TCS00864/16/300/F559 |
| 74 | 17/May/2022 | 30/May/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | EPD received complaint from DSD on 14 and 16 May 2022 concerning about muddy water observed entering Tsui Ping River. | Heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to | No comment by IEC on 13 June 2022 | TCS00864/16/300/F562a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------|-------------|------------------|---------|----------|--|--|-----------------------------------|----------------------|
| | | | | | | | | | have been caused by the project. | | |
| 75 | 27/May/2022 | 9/Jun/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | EPD received complaint from DSD on 27 May 2022 concerning about muddy water observed entering Tsui Ping River, with similar situation observed at Tin Hau Temple and Po Lam Road. | Heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project. | No comment by IEC on 13 June 2022 | TCS00864/16/300/F563 |
| 76 | 6, 7, 8/Jun/2022 | 7, 8, 9/Jun/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | On 6 June 2022, DSD informed that dirty water with bad odour was observed entering Tsui Ping River this morning at the upstream near junction of Kai Lim Road and Tsui Ping Road. The situation has persisted over 50 mins. Furthermore, muddy water was observed entering Tsui Ping River, with similar situation at Tin Hau Temple and Po Lam Road (山渠) on 6, 7 and 8 June 2022. | As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project. | Sent to EPD on 21 June 2022 | TCS00864/16/300/F565 |
| 77 | 14/Jun/2022 | 15/Jun/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | DSD concerning muddy water discharge found at Tin Hau Temple and Po Lam Road on 14 June pm. | As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that | Sent to EPD on 29 June 2022 | TCS00864/16/300/F566 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-----------------------------|------------------------|---------------------------------|-------------|------------------|---------|----------|---|--|--|----------------------|
| | | | | | | | | | complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project. | | |
| 78 | 8/Aug/2022 | 8/Aug/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | DSD advised EPD that muddy water was observed entering Tsui Ping River in the morning of 8 August 2022, with similar situation at Tin Hau Temple and Po Lam Road | As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. No muddy water discharge was evident in the morning or afternoon of 8 August 2022. It is therefore considered that the muddy water discharge observed by DSD in the morning of 8 August 2022 was unlikely to have been caused by the ARQ contracts of C1 or C4. | No comment by IEC on 19 September 2022 | TCS00864/16/300/F580 |
| 79 | 12/Aug/2022 | 12/Aug/2022 | Anderson Road Quarry Site | DSD | Water Quality | DSD | NA | DSD advised EPD that muddy water was observed entering Tsui Ping River in the morning of 12 August 2022, with similar situation at Tin Hau Temple and Po Lam Road (山渠). | As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. No muddy water discharge was evident in the morning of 12 August 2022. It is therefore considered that the muddy water discharge observed by DSD in the morning of 12 August 2022 was unlikely to have been caused by the ARQ contracts of C1 or C4. | No comment by IEC on 19 September 2022 | TCS00864/16/300/F581 |
| 80 | 29&30/Sep/2022 & 3 Oct 2022 | | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | DSD | NA | DSD's complaint was made to EPD who requested CEDD in the same respective mornings to handle and investigate in | As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. No muddy water | Sent to EPD on 18 October 2022 | TCS00864/16/300/F593 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------------|-------------|------------------|-------------------------|----------|---|--|--------------------------------|----------------------|
| | | | | | | | | accordance with the procedure in EM&A Manual. | <p>discharge from ARQ Site was evident in the morning of 29 and 30 September 2022. It is therefore considered that the muddy water discharge observed by DSD in the morning of 29 and 30 September was unlikely to have been caused by the ARQ contracts of C1 or C4.</p> <p>During wet season, the Contractor was strongly reminded to implement adequate water quality mitigation measures to minimise the impact arising from the construction site. The Contractor should closely monitor the discharge quality from the Site to avoid non-compliance. The ET will pay special attention on water quality mitigation measures implementation on site through regular site inspection, and give advice on remedial action when necessary.</p> <p>Incidentally, it is noted that Site R2-9 has kept discharging muddy water to downstream manhole D310. Record photos of the manhole dated 6, 7 and 8 October 2022 are enclosed for reference.</p> | | |
| 81 | 18/Oct/2022 | 20/Oct/2022 | Anderson Road Quarry (ARQ) Site | DSD | Dust Quality | Referred by 1823 to EPD | NA | A public complaint was referred by 1823 to EPD on 18 October 2022, regarding the dust problem generated from the construction site in Anderson Road near On Tai Estate due to typhoon signal no. 3. EPD | <p>In our investigation, both the Contractors had implemented dust mitigation measures to reduce the potential impact to the public. However, in particular during dry season, Contract 4 was reminded to enhance the dust suppressive measures as far as practicable. As there were no air monitoring results exceeding the limit level, it is considered that the dust</p> | Sent to EPD on 3 November 2022 | TCS00864/16/300/F596 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint | |
|----------|-------------------|------------------------|---------------------------------|-------------|------------------|---------|----------|--|--|--|----------------------------|----------------------|
| | | | | | | | | contacted the complainant who was a resident of Shing Tai House, On Tai Estate. The complainant expressed concern about the construction dust generated from Anderson Road Quarry (ARQ) site and requested the site to step up dust suppression measures. | mitigation measures implemented were effective in suppressing the fugitive dust. Nevertheless, as the construction site is close to the residential area, both the Contractors were reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme. | | | |
| 82 | 17/May/2023 | 19/May/2023 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | DSD | NA | EPD received complaint from DSD concerning muddy water was observed entering Tsui Ping River from the upstream in the afternoon of 17 th May 2023, with similar situation at Po Lam Road (山渠). The case was then referred from EPD to CEDD for follow-up. Environmental Team (ET) initiated the handing procedure in accordance with the Environmental Monitoring & Audit Manual to investigate whether it is related to the Project of Development of Anderson Road Quarry (ARQ) Site. | As a matter of fact, the heavy rains led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. There was no evident muddy water discharge from ARQ Site in the afternoon of 17 th May 2023. Therefore, it is considered unlikely that the muddy water discharge observed by DSD in the afternoon of 17 May 2023 was caused by the ARQ contracts of Contract 1 or Contract 4. | During the wet season, the Contractor was strongly reminded to implement adequate water quality mitigation measures to minimise the impact arising from the construction site. The Contractor should closely monitor the quality if the discharge from the Site to avoid non-compliance. The ET will pay special attention to the implementation of water quality mitigation measures on site through regular site | Sent to EPD on 29 May 2023 | TCS00864/16/300/F643 |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|-----------------------------------|------------------------------|------------------|---------|----------|---|---|--------------------------------|-----------------------|
| | | | | | | | | | inspections, and provide advice on remedial action when necessary. | | |
| 83 | 4 July 2023 | 4 July 2023 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | DSD | NA | EPD received complaint from DSD concerning muddy water was observed entering Tsui Ping River from the upstream in the morning of 4 July 2023, with similar situation at Po Lam Road (山渠). | As a matter of fact, the heavy rains led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. There was no evident muddy water discharge from ARQ Site in the morning of 4 July 2023. Therefore, it is considered unlikely that the muddy water discharge observed by DSD in the morning of 4 July 2023 was caused by the ARQ contracts of Contract 1 or Contract 4. During the wet season, the Contractor was strongly reminded to implement adequate water quality mitigation measures to minimise the impact arising from the construction site. The Contractor should closely monitor the quality of the discharge from the Site to avoid non-compliance. The ET will pay special attention to the implementation of water quality mitigation measures on site through regular site inspections, and provide advice on remedial action when necessary. | Sent to EPD on 18 July 2023 | TCS00864/16/300/F653 |
| 84 | 19 Jan 2024 | 23 Jan 2024 | On Kin Road, Anderson Road Quarry | KTDC member Mr. Hsu Yau-wa i | Noise Quality | EPD | NA | A public complaint was received by EPD Regional Office (East) on 19 January 2024 regarding the construction noise generated from construction works at On | As advised by the RE of Contract 4, under CEDD Contract No. ED/2020/02, the Contractor was required to lift 9 precast beams of an elevated walkway. The works was carried out over for four consecutive nights starting from 16 January 2024 and has already completed. The Contractor | Sent to EPD on 29 January 2024 | TCS00864/16/300/F684a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|--------------------|------------------------|---------------------------------|-------------|------------------|---------|----------|---|---|---------------------------|-----------------------|
| | | | | | | | | Kin Road, Anderson Road Quarry (CEDD Contract No. ED/2020/02) at night from 10pm to 6am. | possessed a valid Construction Noise Permit (CNP) (GW-RE0030-24) from 15 to 24 January 2024. The Contractor also confirmed that lift beams work was undertaken on On Kin Road between 16 to 20 January 2024. These works were conducted from 23:00 to 02:00 and involve the use of a crane as the only PEM, which complied with the relevant CNP (GW-RE0030-24). To mitigate noise impact on the public during nighttime, a series of acoustic mats were erected around the work area. | | |
| 85 | 23 and 26 Apr 2024 | 23 and 26 Apr 2024 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | EPD | NA | EPD received complaint from DSD concerning muddy water was observed entering Tsui Ping River from the upstream on 23 and 26 April 2024, with similar situation at the catchpit at Tin Hau Temple. | Joint site inspection among the RSS, Contractor of Contract 4 and ET was carried out on weekly basis to audit the environmental performance. The implementation of mitigation measures were summarized below:- (a) The wastewater treatment facilities were implemented and properly functioned. (b) To minimize the generation of muddy water, the exposed areas were covered either with an impervious sheet or through hydroseeding. (c) Sump pits were constructed at the lowest point of the work area to store continuous rainfall, which helps prevent overload of wastewater treatment facilities were and ensures wastewater was properly treated | Sent to EPD on 6 May 2024 | TCS00864/16/300/F698a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------------|-------------|------------------|---------|----------|---|--|----------------------------|------------------------|
| | | | | | | | | | before discharge to the designated discharge points. | | |
| 86 | 6 May 2024 | 6 May 2024 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | EPD | NA | EPD received complaint from DSD concerning muddy water was observed entering Tsui Ping River from the upstream on 6 May 2024, with similar situation at the catchpit at Tin Hau Temple. | Joint site inspection among the RSS, Contractor of Contract 4 and ET was carried out on weekly basis to audit the environmental performance. The implementation of mitigation measures were summarized below: <ul style="list-style-type: none"> - The wastewater treatment facilities were implemented and properly functioned. - To minimize the generation of muddy water, the exposed areas were covered either with an impervious sheet or through hydroseeding. - Sump pits were constructed at the lowest point of the work area to store continuous rainfall, which helps prevent overload of wastewater treatment facilities were and ensures wastewater was properly treated before discharge to the designated discharge points. | Sent to EPD on 20 May 2024 | TCS00864/16/300/F701a |
| 87 | 20 May 2024 | 20 May 2024 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | EPD | NA | EPD received complaint from DSD concerning muddy water was observed discharge from upstream of Tsui Ping River and at Tin Hau Temple in the morning of 20 May 2024. | Joint site inspection among the RSS, Contractor of Contract 4 and ET was carried out on weekly basis to audit the environmental performance. The implementation of mitigation measures were summarized below: <ul style="list-style-type: none"> - The wastewater treatment facilities were implemented and properly | Sent to EPD on 30 May 2024 | TCS00864/16/300/F0702a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------------|-------------|------------------|---------|----------|--|--|----------------------------------|------------------------|
| | | | | | | | | | <ul style="list-style-type: none"> - functioned. - To minimize the generation of muddy water, the exposed areas were covered either with an impervious sheet or through hydroseeding. - Sump pits were constructed at the lowest point of the work area to store continuous rainfall, which helps prevent overload of wastewater treatment facilities and ensures wastewater was properly treated before discharge to the designated discharge points. | | |
| 88 | 9 September 2024 | 10 September 2024 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | EPD | NA | EPD received complaint from DSD concerning muddy water was observed entering Tsui Ping River (TPR) from the upstream at Tin Hau Temple in the morning of 9 September 2024. | <p>Joint site inspection among the RSS, Contractor of Contract 4 and ET was carried out on weekly basis to audit the environmental performance. The implementation of mitigation measures were summarized below:-</p> <ul style="list-style-type: none"> (a) The wastewater treatment facilities were implemented and properly functioned. (b) To minimize the generation of muddy water, the exposed areas were covered either with an impervious sheet or through hydroseeding. (c) Sump pits were constructed at the lowest point of the work area to store continuous rainfall, which helps prevent overload of | Sent to EPD on 23 September 2024 | TCS00864/16/300/F0718a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------------|------------------------|---------------------------------|-------------|----------------------|---------|----------|---|--|--|-------------------|
| | | | | | | | | | wastewater treatment facilities and ensures wastewater was properly treated before discharge to the designated discharge points. | | |
| 89 | 15 and 18 December 2024 | 20 December 2024 | Anderson Road Quarry (ARQ) Site | Public | Dust and Muddy Water | EPD | NA | <p>成條街道沙塵滾滾和大量泥水流出地盤，直接流到外面雨水渠。大型地盤車輛，泥頭車無洗車設施離開地盤，成條街道沙塵，經常吹到成條街沙塵滾滾建築物料沒有掩蓋，經常吹到成條街沙塵滾滾，掘挖機操作時未有做好防塵措施，導致塵土飛揚。地盤工人沖刷泥頭車灰塵及泥土到雨水渠。</p> <p>A public complaint was referred by EPD on 19 December 2024, regarding the dust and muddy water arising from the project. The complainant mentioned that the muddy water runoff from site and discharge of muddy water observed at the public drainage system. Moreover, sandy stockpile was not covered properly and lack of dust mitigation measures when the</p> | <p>As confirmed by the Contractor of Contract 3 – NE/2017/03, no major construction activities was carried out in Site E3, but transportation of stockpiles and materials for storage in Site E3. Site inspection was carried out by the Contractor, the observation during site inspection on 15 and 18 December 2024 are summarised as follow.</p> <ul style="list-style-type: none"> (a) As dust mitigation measures, sandy stockpile was covered and water spraying was provided to reduce dust impact. (b) Vehicular access roads under Contract 3 were hard paved on haul road at exit point and sprayed continuously by water bowser to minimize generation of fugitive dust. (c) Vehicle wheel and body washing was provided before leaving site and facilities were constructed to collect wastewater from wheel washing to prevent muddy water runoff from site. (d) Mechanical cover for dump truck used to reduce dust impact. | <p>Sent to EPD on 30 December 2024</p> <p>TCS00864/16/300/F0730a</p> | |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|---------------------------------|-------------|------------------|---------|----------|--|---|--|------------------------|
| | | | | | | | | excavator was operation and fugitive dust was blowing to the street. | | | |
| 90 | 22 January 2025 | 23 January 2025 | Anderson Road Quarry (ARQ) Site | DSD | Muddy Water | EPD | NA | <p>Muddy water was observed from the upstream drainage systems collecting discharged from the development sites of ARQ. EPD received complaint from DSD concerning muddy water discharge was observed from the upstream drainage systems collecting discharges from the development sites of ARQ on 22 January 2025. As the muddy water would finally enter Tsui Ping River (TPR) and causes pollution problem to TPR.</p> | <p>As advised by the RSS and the Contractor of Contract 1, the majority of the Contract 1 area has been handed over to other contracts on ARQ Site (such as building contract). Each of these interfacing contractors should have been granted a licence for discharge under the Water Pollution Control Ordinance. The discharge points of ARQ Site were located at Q2 and catchpit at Po Lam Road. The remaining area under Contract 1 were some hard paved roads within the ARQ Site. There were no water quality impact anticipated for Contract 1 from the remaining works.</p> <p>Joint site inspection among the RSS, Contractor of Contract 4 and ET was carried out on weekly basis to audit the environmental performance. The implementation of mitigation measures were summarized below:-</p> <ul style="list-style-type: none"> (a) The wastewater treatment facilities were implemented and properly functioned. (b) To minimize the generation of muddy water, the exposed areas were covered either with a tarpaulin sheet or through hydroseeding. (c) Temporary water storage areas | <p>Sent to EPD on 10 February 2025</p> | TCS00864/16/300/F0738a |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------------|------------------------------|---------------------------------|-------------|------------------|---------|----------|---|---|--|-------------------|
| | | | | | | | | | were constructed at the lowest point of the work area to store continuous rainfall, which helps prevent overload of wastewater treatment facilities and ensures wastewater was properly treated before discharge to the designated discharge points. | | |
| 91 | 27 and 28 February 2025 | 28 February and 1 March 2025 | Anderson Road Quarry (ARQ) Site | DSD | Water Quality | EPD | NA | <p>During DSD's site inspection at ARQ Site Underground Stormwater Retention (USR) Tank on 27 Feb 2025, continuous inflow of muddy water, construction debris and cementitious material into the tank was observed. Additionally, discharge of tar from the upstream drainage systems at ARQ sites into the tank was also observed during DSD's site inspection on 28 Feb 2025.</p> | <p>As advised by the RSS, the majority of the Contract 1 area has been handed over to other contractors on ARQ Site (such as building contract). Each of these interfacing contractors should have been granted a license for discharge under the Water Pollution Control Ordinance. The remaining work under Contract 1 includes recent road resurfacing. However, based on the work nature and lack of rainfall in recent weeks, the release of cementitious material, muddy water and tar into the USRT were not anticipated.</p> <p>Joint site inspection among the RSS, Contractor of Contract 4 and ET was carried out on weekly basis to audit the environmental performance. The implementation of mitigation measures were summarized below:-</p> <ul style="list-style-type: none"> (d) The wastewater treatment facilities were implemented and properly functioned. (e) To minimize the generation of muddy water, the exposed areas were covered either with a | <p>Sent to EPD on 5 March 2025</p> <p>TCS00864/16/300/F0742b</p> | |

| Log ref. | Date of Complaint | Date of Received by ET | Complaint Location | Complainant | Complaint nature | Channel | Ref. no. | Complaint details | Follow up action | Log ref. | Date of Complaint |
|----------|-------------------|------------------------|--------------------|-------------|------------------|---------|----------|-------------------|--|----------|-------------------|
| | | | | | | | | | tarpaulin sheet or through hydroseeding. (f) The haul road under Contract 4 was hard-paved to minimize the generation of muddy water, and no muddy runoff from the site was observed. | | |

Appendix N

Implementation Status for Water Quality Mitigation Measures

Water Quality Mitigation Measure



Q1. Wastewater treatment facility 30 cu.m Sedimentation Tank + AquaSed of 15 cu.m per hour + WETSEP



Q1. Wastewater treatment facility 30 cu.m Sedimentation Tank + AquaSed of 15 cu.m per hour + WETSEP